JVC
PROFESSIONAL

PROFESSIONAL PRODUCTS

GENERAL CATALOGUE

PAL/CCIR

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This catalogue is for world-wide use. Additional products may not be listed, and some models may not be available in your region. Please check with your dealer for availability.

Digital Production

DIGITAL-S Camcorders

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DIGITAL-S Editing Systems

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DV

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System and accessories 17
GR-DLS1E Compact digital still camera/camcorder 18

Digital Vision Mixer

KM-5000E Multi-Format Vision Mixer 19
System accessories 20

Non-linear Editing Workstation

MW-S1000E Media Workstation 21
System and accessories 22

Digital Camcorder

DIGITAL S

DY-90E

COMPONENT DIGITAL
4:2:2

- Light weight 6.9 kilograms including typical lens, viewfinder, battery and tape
- Less than 30 watts power requirement while recording
- Fully digital Camera to Tape parallel digital signal recording, rugged and high quality 50 Mbps, 8-bit, 4:2:2 component Digital S format
- 2-hour (124 minutes) Digital S recording time with DS-124 cassette
- Advanced generation 14-bit digital signal camera processing
- Records four 16-bit 48 kHz PCM audio channels with more than 80 dB dynamic range (75 dB in camcorder playback).
- Both +48 V XLR and 6-pin camera microphone inputs, plus 2 additional +48 V mic/line XLR inputs

Imaging

- Three 2/3" 745 H x 581 V pixel IT CCDs with total 600% dynamic range reproduction due to exclusive track and hold CCD sampling circuit. Low CCD vertical smear level of minus 120 dB
- High sensitivity of F11 at 2000 lux gives creative flexibility and ease of lighting
- Lolux mode provides outstanding reproduction down to 0.75 lux
- DSP processing enables natural detail enhancement, and elimination of spot noise.
- 14-bit DSP processing gives exceptional reproduction of dark areas, highlights and highlight colour.
- Automatic shooting from 4 to 24,000 lux thanks to JVC's pioneering Full Auto Shooting (FAS) mode with continuous automatic white balance.
- Two scene files save advanced custom camera setups in removable setup box in addition to standard setup.
- Other features: One touch black stretch/compress, smooth transition mode, precision "Accufocus" mode, adjustable gamma point, adjustable detail frequency, and continuous auto-black (CAB).

Digital S Recording

- Up to 124 minutes uninterrupted recording with DS-124 cassette.
- Robust 1/2 inch metal particle cassettes
- Automatic editing function (AEF) for smooth cuts
- 4x picture search in both directions
- Quick review function
- Colour video playback for monitoring
- Phantom power supply for microphone inputs
- Built-in monitor speaker and headphones jack
- EBU time code generator with external input and output, external lock, jam sync and seamless time code between takes.
- Time date generator
- Large LCD display indicates time code, modes and functions
- Fully menu configurable
- Tape/Battery remaining indication
- Rugged die cast chassis using ceramic tape guide rollers and sapphire flanges for long life
- Durable and reliable centre rotating head design

(See specification on page 7.)

JVC
DIGITAL S
4:2:2

(Preliminary photos)

Included Accessories

- Tripod plate
- Camera microphone (6-pin)
- Anton Bauer battery holder
- Setup box

Optional Accessories (see page 6)

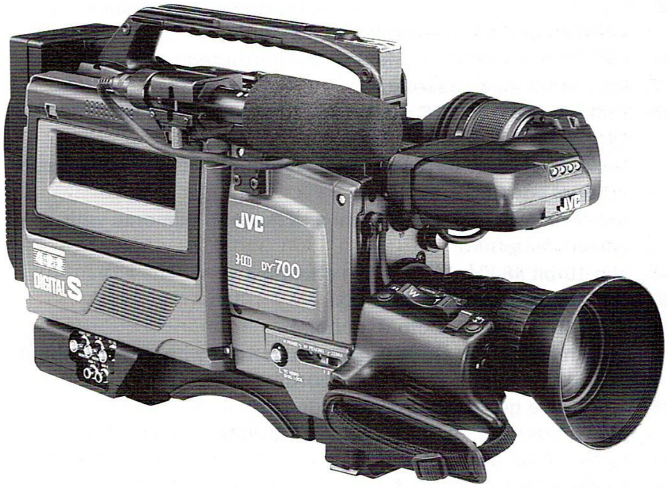
- Viewfinder
- Lens
- Microphone
- Microphone holder
- Power system
- Case

Digital Camcorder

DIGITAL S

DY-700E

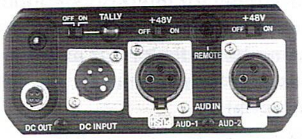
COMPONENT DIGITAL
4:2:2



- Most economical 4:2:2 camcorder in the world
- Professional and practical, rugged and high quality 50 Mbps, 8-bit, 4:2:2 component Digital S recording
- 8.5 kilograms including typical lens, viewfinder, battery and tape
- 34 watts power requirement while recording
- Viewfinder status overlay for essential information such as audio levels, remaining recording time and battery information such as voltage, VTR operation, and setup.

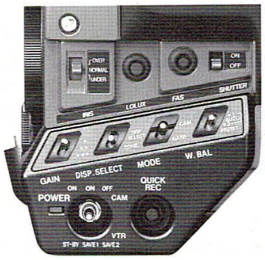
Imaging

- Three 1/2" 440K pixel IT micro lens CCDs with virtually no vertical CCD smear.
- High sensitivity of F8 at 2000 lux
- Quick recording mode sets automatic shooting for level control via both variable gain and variable shutter
- Lolux mode provides excellent colour balance down to 1.5 lux at F1.4.
- Horizontal resolution is 750 TV lines.
- 60 dB signal to noise ratio
- Variable Scan View captures flicker-free images from computer and monitor CRTs, even if the scan rate differs from the camcorder frame rate.
- Continuous Auto Black samples the CCD's optical black for perfect black balance without interrupting shooting



Digital S Recording

- Up to 124 minutes uninterrupted recording
- Two 16-bit 48 kHz PCM audio channels
- Robust 1/2 inch metal particle cassettes
- Automatic editing function (AEF) for smooth cuts
- 10 x picture search in both directions
- Quick review function
- Colour video playback
- Phantom power supply for microphone inputs
- Built-in monitor speaker and earphone jack
- Analogue composite video and audio output
- EBU time code generator with external input and output, external lock, jam sync and seamless time code between takes.
- Large LCD display indicates time code, modes and functions
- Fully menu configurable
- Tape/Battery remaining indication
- Rugged die cast chassis using ceramic tape guide rollers and sapphire flanges for long life
- Centre rotating head design for long head life



(See specification on page 7.)

Included Accessories

- Tripod plate
- Camera microphone (6-pin)
- Battery holder (NP-1 or NB-G1)

Optional Accessories (see page 6)

- Viewfinder
- Lens
- Other microphones
- Microphone holder
- Power system
- Case

Dockable Recorder

BR-D40E

COMPONENT DIGITAL
4:2:2

- High picture quality with 3.3:1 compression and 8-bit 4:2:2 component digital recording at 50 Mbps
- Up to 2 hours (124 minutes) of uninterrupted recording
- Robust 1/2 inch cassettes
- Docks directly to JVC professional camera KY-D29E, KY-27E/BE/CE, and KY-19E
- Docks with older JVC cameras such as KY-15 and KY-25 with optional adapter.
- Docks with Sony DXC, Hitachi and Ikegami cameras with optional adapters.
- Two 16-bit 48 kHz PCM audio channels
- Records two cue audio tracks
- 10x picture search both directions
- Built-in EBU Time Code Reader/Generator with external input and output. Dual Time code recording.
- Time Code generator may be externally locked. Jam Sync makes possible seamless time code edits.
- Built-in Time Date generator
- Quick review function
- Large LCD display indicates time code, modes and functions
- Analogue signal outputs: composite video + audio
- Colour video playback
- Phantom power supply for microphone inputs
- Field-proven heavy duty die cast chassis with ceramic rollers and centre rotating head design for extremely long life
- Sapphire flanges and tape cleaner for carefree operation
- Fully menu configurable
- Automatic Editing Function (AEF) for smooth cuts
- Built-in monitor speaker and earphone jack

(See specification on page 7.)

Optional Accessories (see page 6)
- Power system
- SA-S40U stand-alone adapter (check for availability)
- VC-P454B 4 meter 26-pin to 26-pin cable to camera

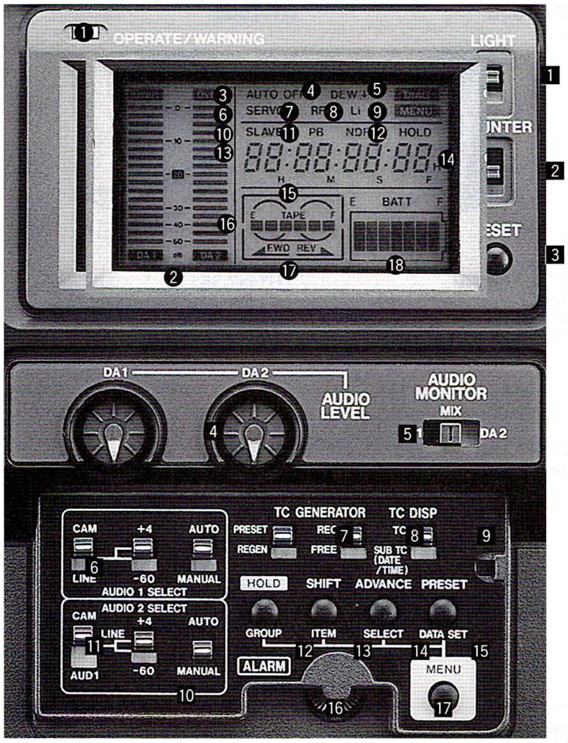
JVC
BR-D40
VIDEO CASSETTE RECORDER
4:2:2
DIGITAL S

JVC
BR-D40U
4:2:2
DIGITAL S
JVC
KY-D29

(Shown with optional camera head)

BR-D40E

LCD display section


OPERATE/WARNING
LIGHT
COUNTER
RESET
AUTO OFF
DEW
SERVO
RF
Li
MENU
SLAVE
PB
NDF
HOLD
H M S F
TAPE
FWD REV
BATT
DA1
DA2
AUDIO LEVEL
AUDIO MONITOR
MIX
CAM
+4
AUTO
LINE
-60
MANUAL
AUDIO 1 SELECT
AUDIO 2 SELECT
AUD1
TC GENERATOR
TC DISP
PRESET
REGEN
REC
FREE
TC
SUB TC (DATE /TIME)
HOLD
SHIFT
ADVANCE
PRESET
GROUP
ITEM
SELECT
DATA SET
ALARM
MENU

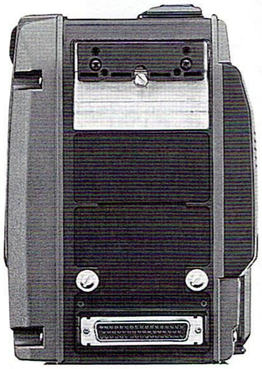
DISPLAY

- ① OPERATE ON/WARNING indicator
- ② DA1/DA2 (audio channel 1/audio channel 2) level meter
- ③ AUTO OFF indicator
- ④ DEW indicator
- ⑤ DIAG indicator
- ⑥ SERVO UNLOCK indicator
- ⑦ RF LOW LEVEL indicator
- ⑧ Lithium backup battery indicator
- ⑨ MENU indicator
- ⑩ SLAVE LOCK indicator
- ⑪ TC PB indicator
- ⑫ HOLD indicator
- ⑬ Counter display
- ⑭ H (hour meter) indicator
- ⑮ Tape,casette indicator
- ⑯ Tape remaining time indicator
- ⑰ Tape direction indicator
- ⑱ Battery indicator

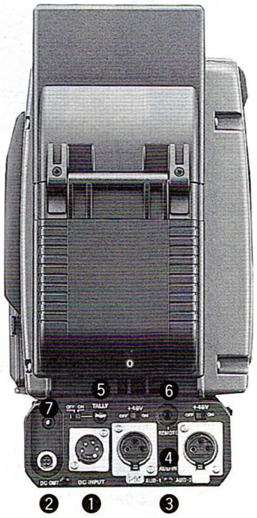
CONTROL

- 1 LIGHT
- 2 COUNTER
- 3 COUNTER RESET
- 4 AUDIO LEVEL control DA1/DA2
- 5 AUDIO MONITOR switch
- 6 AUDIO INPUT 1 select switches
- 7 TC GENERATOR PRESET/REGEN switch
- 8 TC GENERATOR REC/FREE RUN switch
- 9 TC DISP TC/SUB TC switch
- 10 AUDIO INPUT LEVEL selection switch
- 11 AUDIO INPUT 2 select switches
- 12 HOLD (GROUP) button
- 13 SHIFT (ITEM) button
- 14 ADVANCE (select) button
- 15 PRESET (DATA SET) button
- 16 ALARM volume
- 17 MENU button

Interface panel

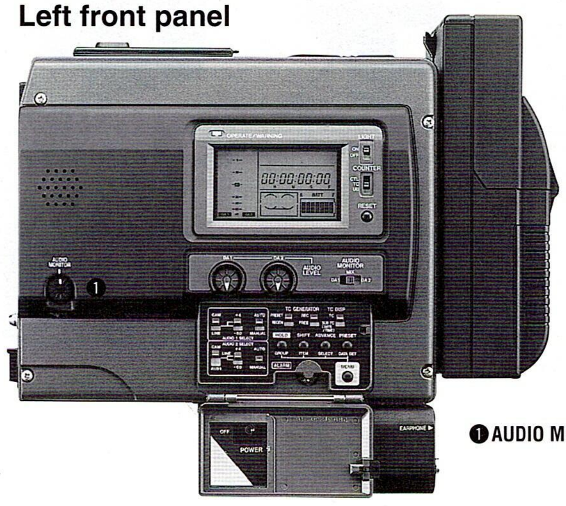


Rear panel



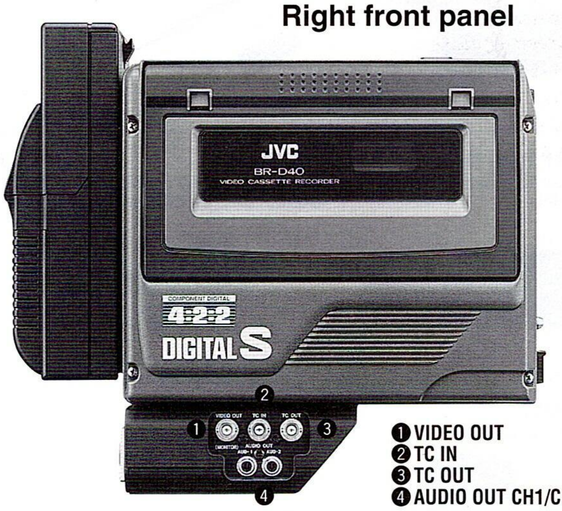
- ① DC INPUT
- ② DC OUT
- ③ AUDIO INPUT CH-1/CH-2
- ④ REMOTE/SERVICE connector
- ⑤ TALLY lamp/switch
- ⑥ +48 V phantom power switch
- ⑦ Earphone jack

Left front panel



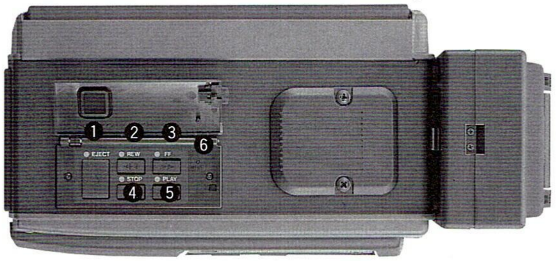
- ① AUDIO MONITOR control

Right front panel


JVC
BR-D40
VIDEO CASSETTE RECORDER
COMPONENT DIGITAL
4:2:2
DIGITAL S
1
2
3
4

- ① VIDEO OUT
- ② TC IN
- ③ TC OUT
- ④ AUDIO OUT CH1/CH2

Operation panel section


1
2
3
4
5
6
EJECT
REW
FF
STOP
PLAY

- ① EJECT button/Lamp
- ② REW button/Lamp
- ③ FF button/Lamp
- ④ STOP button/Lamp
- ⑤ PLAY button/Lamp
- ⑥ Operation panel cover

Optional Accessories

DY-90E/DY-700E/BR-D40E

COMPONENT DIGITAL 4:2:2

DY-90E

A18x9B12U (Fujinon)
18: 1 Power Zoom Lens
YJ18x9BK12U (Canon)
18:1 Power Zoom Lens

DY-90E

(Fujinon w/2x extender)
A15x8BEVM
15:1 Power Zoom Lens
A10x4.8BEVM
10:1 Power Zoom Lens
A20x8BEVM
20:1 Power Zoom Lens

DY-90E

(Canon, w/2x extender)
J15ax8BIRS
15:1 Power Zoom Lens
J9ax5.2BIRS
9:1 Power Zoom Lens
J20ax8EIRS
20:1 Power Zoom Lens

DY-700E

(Fujinon)
S14x7.5B12U
14:1 Power Zoom Lens
S18x6.7B12U
18:1 Power Zoom Lens

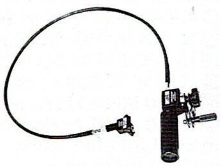
DY-700E

(Canon)
YH14x7.3K12U
14:1 Power Zoom Lens
YH18x6.7K12U
18:1 Power Zoom Lens

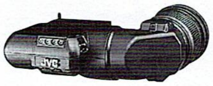
HZ-ZS13BU
Zoom Servo Control Unit

HZ-FM13U (Fujinon)
Manual Focus Control

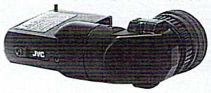
HZ-FM15V (Canon)
Manual Focus Control



VF-P116E
Heavy Duty 1.5" Viewfinder



VF-P115E
1.5" Viewfinder

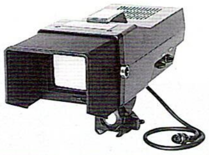


AA-P250E
AC Power Adapter

MV-P615U
Monaural Microphone
XLR for DY-90E

MV-P616U
Monaural Microphone
6-pin for DY-700E

VF-P400E
4" Viewfinder

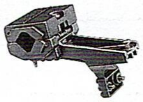


VF-P550BE
5" Viewfinder

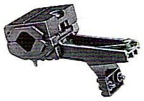
NP-1 Type Battery
(User-supplied battery and holder)

IDX
Lithium Ion
NP-L40

KA-A90U
Mic Holder for DY-90E
(Actual design differs.)



KA-A70U
Mic Holder for DY-700E



CB-P27U
Carrying Case

CB-P29U
Carrying Case

QRQ27
Battery Adapter

Camcorder Specifications

General	Digital S Camcorder DY-90E	Digital S Camcorder DY-700E	Digital S Dockable Recorder BR-D40E
Recording time	Max 124 min. with DS-124 cassette	←	←
Weight	6.9 kg (15.2 lbs) including lens, viewfinder, battery and tape	Approx. 8.5 kg (18.7 lbs) including lens, viewfinder, battery and tape	Approx. 3.9 kg
Power consumption	Max 35 W, Rec. 29 W including lens and viewfinder	Max 40 W, Rec. 34 W including lens and viewfinder	Max 28 W, Rec. 22 W
Battery DC input range	11-17 V DC	←	←
Operating temperature	0°C to 40°C (+32°F to 104°F)	←	←
Dimensions (mm)	382.5 (W) x 296 (H) x 153 (D)	435.5 (W) x 306.5 (H) x 141 (D)	301 (W) x 266 (H) x 142 (D)

Imaging

Sensor	3 x 2/3" Interline transfer CCDs	3 x 1/2" Interline transfer CCDs
Picture elements	745 (H) x 581 (V)	440,000
Optical system	2/3"F 1.4 RGB prism	1/2" F1.4 RGB prism
Mount	2/3" bayonet	1/2" bayonet
Filter	3200K,5600K+1/4 ND, 5600K, 5600K + 1/16 ND	3200K, 5600K, 5600K + 1/16 ND
Sensitivity	F11 / 2000 lux	F8 / 2000 lux
Minimum illumination	F1.4 / 4 lux, +18 dB	F1.4 / 7.5 lux, +18 dB
Lolux minimum illumination	F1.4 / 0.75 lux	F1.4 / 1.5 lux
Synchronization	Internal/external (auto)	Internal
Registration	0.05 % Without lens, distortion in all area	←
Shutter	1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, variable in ALC	←
Variable scan	1/50.4 – 1/1953.1 Hz	1/50.1 – 1/2067.8, 305 steps
Detail correction	Vertical: 2H Horizontal: 7 MHz, 2.5 MHz, and Mix	Vertical: 2H Horizontal: 2H
Colour bar	EBU full field	←
Gain	0, 6, 9, 12, 18 dB Variable gain in ALC and Lolux	0, 9, 18 dB Variable gain in ALC and Lolux

Recorder Video

Tape speed	57.737 mm/sec	←	←
Sampling	Y4:2:2: 13.5 MHz R-Y / B-Y: 6.75 MHz	←	←
Compression	3.3:1, DCT based Intra-frame compression	←	←
Data rate	50 Mbps	←	←
Video input	no	no	Y,Cb,Cr analogue component via 50-pin connector and SA-S40U
Video output	Composite	←	←

Recorder Audio

Tracks	4x digital, 2x Cue analogue	2x digital, 2x Cue analogue	←
System	4-channel PCM 16-bit / 48 kHz	2 channel PCM 16 bit / 48 kHz	←
Frequency response	20-20,000 Hz (+1/-1.5 dB)	←	←
Distortion	Less than or equal to 0.1%	←	←
Crosstalk	Less than or equal to -70 dB	←	←
Audio input	Camera: 1x 6-pin and 3x +48 V XLR –20 dBs/10 k-ohms balanced, Line: +4 dBs / 10 k-ohms balanced	Camera: 1x 6-pin and 2x XLR Line: +4 dBs / 10 k-ohms balanced	Camera: (via 50-pin) –20 dBs / 10 k-ohms balanced, Line: +4 dBs / 10 k-ohms balanced
Audio output	Line: -6 dBs / Low impedance, unbalanced Headphones: infinity to -17 dBs, Low impedance	←	←

Time Code

Input / output	0+/- 6 dBs high impedance	←	←

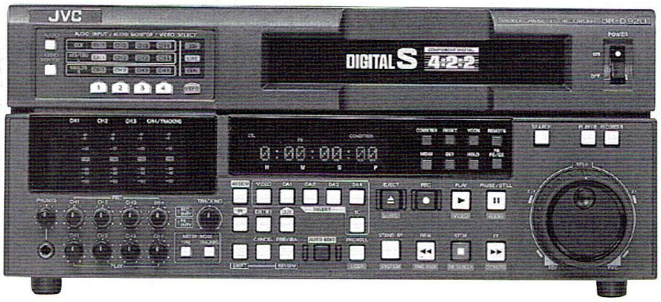
Studio Recorder and Player

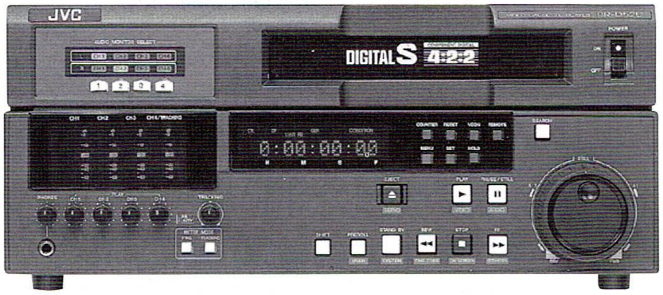
DIGITAL S

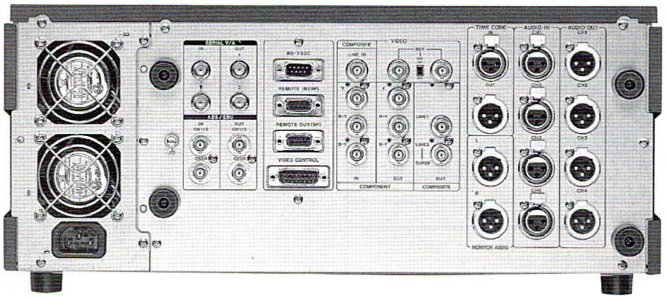
BR-D92E

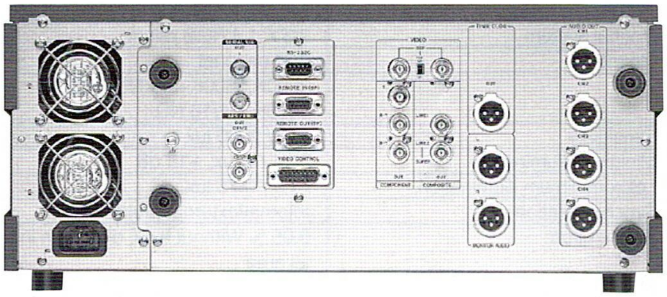
BR-D52E

COMPONENT DIGITAL 4:2:2









BR-D92E Recorder

- 50 Mbps, 8-bit, 4:2:2 Digital S recording
- Tiltable Front Panel editing control for Recorder and Player
- Built-in edit controller for swap editing
- Four independently editable 16-bit 48kHz PCM audio channels
- Adjustable audio record levels
- Optional serial digital video I/O with four channel embedded audio
- Built-in Pre-read for layering and two machine A/B roll
- Video Pre-read window tolerance range of 5H
- 2-hour recording time with DS-124 cassette
- AES/EBU input with sample rate converter

Both BR-D92E Recorder and BR-D52E player

- 50 Mbps, 8-bit, 4:2:2 Digital S playback
- Two-hour playback with DS-124 cassette
- Full front panel TBC control of video level, chroma level, and pedestal level
- Adjustable audio playback levels
- Audible PCM sound in slow motion for precise editing
- ±1/3 variable speed playback (field / frame selectable)
- Jog/shuttle control
- Optional SDI video output with four embedded audio channels
- Analogue I/O: Composite, Component (Y, R-Y, B-Y)
- Balanced 4-channel audio monitor output
- Remote TBC adjustment via Sony compatible 15-pin D-Sub connector
- RS-422A standard control
- RS-232C control and serial port for diagnostics
- LTC time code with balanced I/O
- Rugged die cast chassis using ceramic tape guide rollers and sapphire flanges for long life
- Centre rotating head design for long head life

Options

- SA-D92U 4-channel embedded audio SDI I/O board for BR-D92E
- SA-D52U 4-channel embedded audio SDI I/O board for BR-D52E
- SA-K67U rack mount

Editing Recorders

DIGITAL S

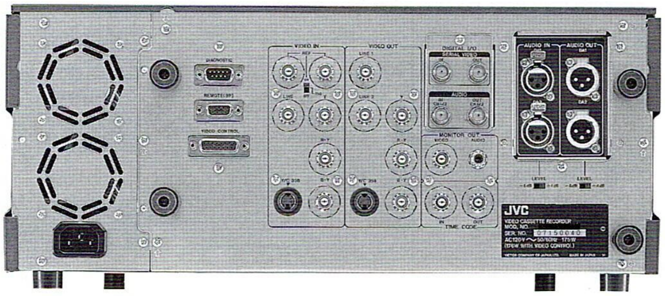
BR-D85E

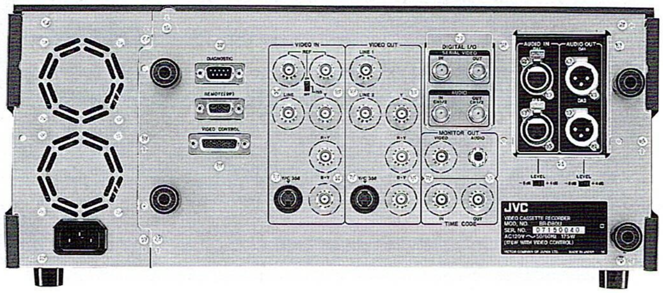
BR-D80E

COMPONENT DIGITAL 4:2:2

JVC
DIGITAL S

JVC
DIGITAL S





(Shown with optional accessory)

BR-D85E : Pre-Read and built-in SDI

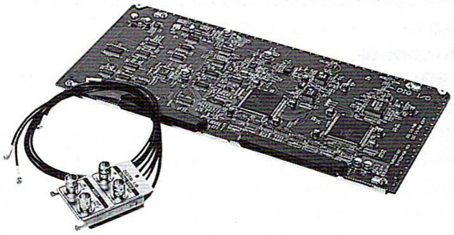
- Built-in video pre-read for layering and two machine A/B roll editing
- Built-in SMPTE 259 serial digital video I/O
- Built-in AES/EBU serial audio inputs and output

BR-D85E and BR-D80E

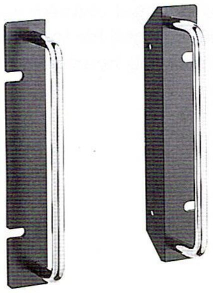
- High quality 50 Mbps, 8-bit, 4:2:2 Digital S recording and playback
- 2-hour (124 minutes) recording time with DS-124 cassette
- ±1/3 variable speed playback (field / frame selec table)
- Jog/shuttle control
- Analogue I/O: Composite, Y/C, Component (Y, R-Y, B-Y)
- SDI is optional in BR-D80E
- RS-422A standard assemble/insert editing and control with external editing controllers
- Frame-by-frame recording and editing
- Two independently editable 16-bit 48 kHz PCM audio channels
- Two cue audio tracks for precise audio editing for precise audio editing.
- Adjustable record levels
- Front panel TBC adjustment of System, SC and video phases
- Remote TBC adjustment via 15-pin D-Sub connector including video level and chroma level
- RS-232C serial port for diagnostics
- LTC/VITC time code
- Re-generation of external time code, or Jam sync
- Rugged die cast chassis using ceramic tape guide rollers and sapphire flanges for long life
- Centre rotating head design for long head life

Options

- SA-D80U: Optional SMPTE 259U serial digital I/O and optional AES/EBU serial audio I/O (BR-D80E)
- SA-K67U: Rack mount
- RM-G22U: TBC remote control unit



SA-D80U
Serial Digital Interface



DIGITAL S Series
Rack Mount SA-K67U

Broadcast Feeder/Players

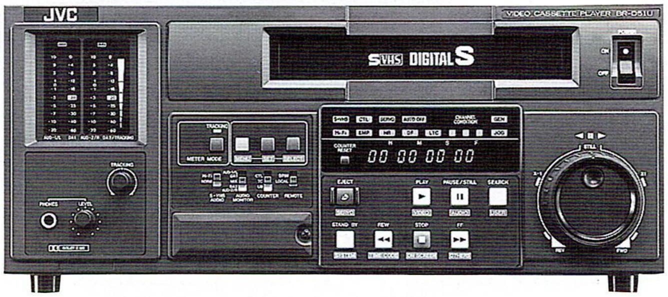
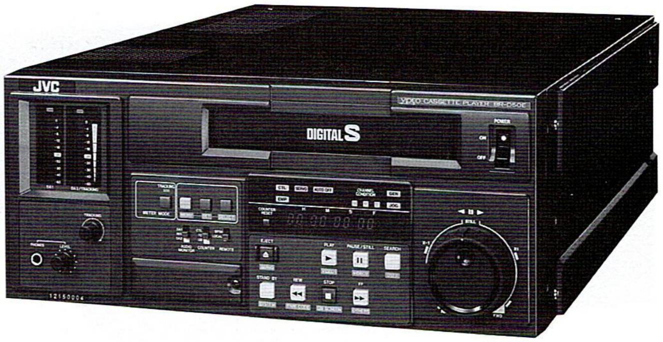
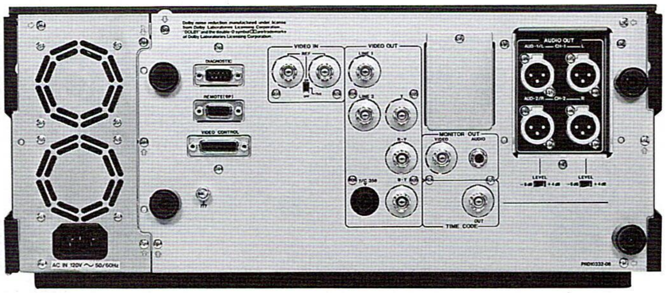
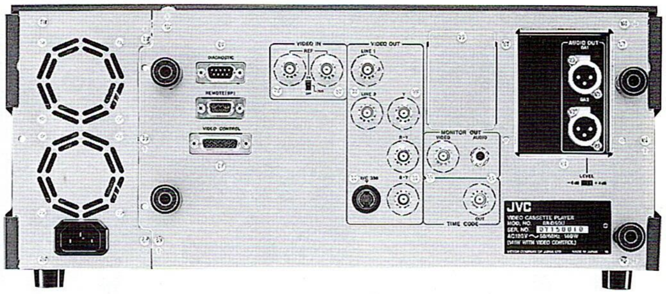
DIGITAL S

BR-D51E

S-VHS 625

BR-D50E

COMPONENT DIGITAL 4:2:2

BR-D51E: S-VHS compatible

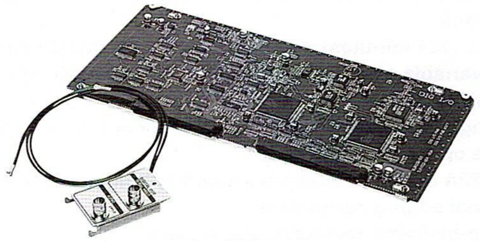
- 3-hour S-VHS playback
- Two S-VHS Hi-Fi audio plus two S-VHS normal audio channel outputs

Both BR-D51E and BR-D50E

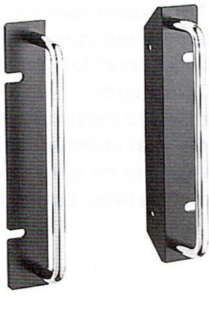
- Editing Feeder/Players
- High quality 50 Mbps, 8-bit, 4:2:2 Digital S playback
- 2-hour (124 minutes) playback time with DS-124 cassette
- ±1/3 variable speed playback (field / frame selectable) in Digital S mode
- Jog/shuttle control
- Analogue I/O: Composite, Y/C, Component (Y, R-Y, B-Y)
- Two 16 bit 48 kHz PCM audio channels
- Two Digital S cue audio tracks for precise audio editing
- Front panel TBC adjustment of System, SC and video phases
- Remote TBC adjustment via 15-pin D-Sub connector including video level, chroma level, and pedestal level
- RS-422A standard editing and control with external editing controllers
- RS-232C serial port for diagnostics
- LTC/VITC time code
- Rugged die cast chassis using ceramic tape guide rollers and sapphire flanges for long life
- Centre rotating head design for long head life

Options

- SA-D50U: Optional SMPTE 259U serial digital output and optional AES/EBU serial audio output
- SA-K67U: Rack mount
- RM-G22U: TBC remote control unit



SA-D50U
Serial Digital Interface



DIGITAL S Series
Rack Mount SA-K67U

Specifications

COMPONENT DIGITAL 4:2:2

General		Recorder BR-D92E	Player BR-D52E	Recorder BR-D85E	Recorder BR-D80E	Digital S/ S-VHS Player BR-D51E*	Player BR-D50E
Rec/PB time		124 min. (DS-124)		←	←	←	←
FF/Rew time		3 min. (DS-124)		←	←	←	←
Picture search		±32 x visible picture		←	←	←	←
Slow motion		±1/3 x with full picture quality (remote required)			←	←	←
Tape		1/2 inch metal particle		←	←	←	←
Tape speed		57.737 mm/s	←	←	←	←	←
Tracks (video / audio)		12 per frame	←	←	←	←	←
Track pitch		20 nanometer	←	←	←	←	←
Control track		1	←	←	←	←	←
Audio cue tracks		2	←	←	←	←	←
Head drum diameter		62 mm	←	←	←	←	←
Head rotation		4500 rpm	←	←	←	←	←
Dimensions		W x H x D 429 mm x 188 mm x 567mm (16-15/16" x 7-7/16" x 22-3/8")					←
Weight		25 kg (55.1 lbs)	24 kg (52.9 lbs)	23 kg (50.7 lbs)	23 kg (50.7 lbs)	23 kg (50.7 lbs.)	22 kg (48.5 lbs.)
Power consumption		180 W	160 W	180 W	180 W	180 W	160 W
Power requirement		AC 220 to 240 V 50/60 Hz		←	←	←	←
Temp	Operating	5°C to 40°C (41°F to 104°F)		←	←	←	←
	Storage	-20°C to 60°C (-4°F to 140°F)		←	←	←	←
Humidity		30% to 80%		←	←	←	←

Video

Sampling		4:2:2 8-bit	←	←	←	←	←
	Y	13.5 MHz	←	←	←	←	←
	R-Y/B-Y	6.75 MHz	←	←	←	←	←
Compression		3.3:1 DCT based intraframe coding			←	←	←
Data rate		50 Mbps	←	←	←	←	←
Frequency response (SDI in, analogue out)	Y	25 to 5.75 MHz, +0.5 / -2.0 dB (analogue out)		25 to 4.5 MHz, +1.0 / -2.0 dB (analogue out)		←	←
	R-Y/B-Y	25 to 2.75 MHz, +/-1.0 dB		←	←	←	←
S/N (SDI in analogue out)		55 dB	←	←	←	←	←
Pre-read window		5H	-	2H	-	-	-
SDI I/O (unbalanced)		option w/ embeded audio		Standard	option	option	option
Analogue I/O (75 ohms unbalanced)	Composite	1Vp-p	← (out)	←		← (out)	← (out)
	Y/C:	Not available	Not available	Y: 1 Vp-p, C: 0.3 Vp-p (Burst)	←	← (out)	← (out)
	Component	Y: 1 Vp-p R-Y / B-Y: 0.7 Vp-p	← (out)	←	←	← (out)	← (out)
	Reference	0.45Vp-p (loop)		←	←	←	←

Video Control Adjustment range

System sync phase	±3 nanoseconds or more		←	←	←	←
System SC phase	360 degrees or more		←	←	←	←
Video phase	±1.0 nanoseconds or more		←	←	←	←
Video level	±3 dB or more		±3 dB or more (remote required)		←	←
Chroma level	±3 dB or more		±3 dB or more (remote required)		←	←
Setup level	0 mV or less to 100 mV		0 mV or less to 100 mV or more (remote required)		←	←

Audio

System	4ch PCM, 32/48 kHz, 16 bit		2ch PCM, 48 kHz, 16 bit		←	←
Frequency response	20 to 20,000 Hz +1/-1.5 dB		←	←	←	←
Dynamic range	More than 85 dB (at 1 kHz)		←	←	←	←
Distortion	Less than 0.1% (1 kHz at operation level)			←	←	←
Crosstalk	Less than -75 dB (at 1 kHz)		←	←	←	←
Headroom	18 dB	←	20 dB	←	←	←
Emphasis	Automatic switching in play		←	←	←	←
Wow and flutter	Below measurable level		←	←	←	←
SDI I/O	option (embedded)	option (embedded)	option	option	option	option
Analogue input	Line: -6 / 0 / +4 dB high impedance balanced			←	←	←
Analogue output	Line: -6 / 0 / +4 dB high impedance balanced			←	←	←
Monitor	-6 dB low impedance balanced			←	←	←
Headphones	Infinity to -20 dBs, 8 ohms		←	←	←	←

* DIGITAL S specifications only.

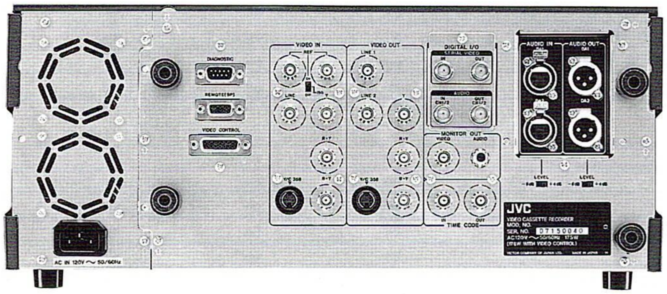
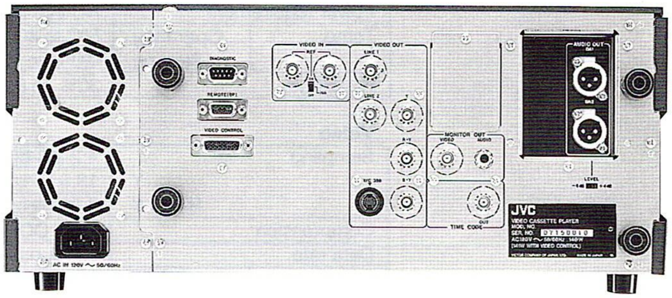
Professional Editing Recorder/Player

DIGITAL S

BR-D750E

BR-D350E

COMPONENT DIGITAL 4:2:2

BR-D750E Recorder

- High quality 50 Mbps, 8-bit, 4:2:2 Digital S recording
- RS-422A standard assemble/insert editing and control with external editing controllers
- Frame-by-frame recording and editing
- Manually adjustable analogue audio record levels
- Re-generation of external time code, or Jam sync

Both BR-D750E Recorder and BR-D350E player

- High quality 50 Mbps, 8-bit, 4:2:2 Digital S playback
- 2-hour (124 minutes) duration with DS-124 cassette
- +/- 1/3 variable speed playback (field / frame selectable)
- Analogue I/O: Composite, Y/C, Component (Y, R-Y, B-Y)
- Two independently editable 16-bit 48 kHz PCM audio channels
- Two cue audio tracks allow monitoring at slow and search speeds
- Remote TBC adjustment via 15-pin D-Sub connector
- RS-422A control & RS-232C serial port for diagnostics
- LTC/VITC time code
- Rugged die cast chassis using ceramic tape guide rollers and sapphire flanges for long life

Options

- SA-D80U: Optional SMPTE 259U serial digital I/O and optional AES/EBU serial audio I/O (BR-D750E)
- SA-D50U: Optional SMPTE 259U serial digital output and optional AES/EBU serial audio output (BR-D350E)
- SA-K67U: Rack mount
- RM-G22U: TBC remote control unit

RM-G22U
TBC Remote Control Unit

Specifications

COMPONENT DIGITAL 4:2:2

General		Recorder BR-D750E	Player BR-D350E
Rec/PB time		124 min. (DS-124)	←
FF/Rew time		3 min. (DS-104)	←
Picture search		±32 x visible picture (remote required)	←
Slow motion		±1/3 x with full picture quality	←
Tape		1/2 inch metal particle	←
Tape speed		57.737 mm/s	←
Tracks (video / audio)		12 per frame	←
Track pitch		20 nanometer	←
Control track		1	←
Audio cue tracks		2	←
Head drum diameter		62 mm	←
Head rotation		4500 rpm	←
Dimensions		(W x H x D) 429 mm x 188 mm x 567 mm (16-15/16" x 7-7/16" x 22-3/8")	
Weight		23 kg (50.7 lbs)	22 kg (48.5 lbs.)
Power consumption		180 W	160 W
Power requirement		AC 220 to 240 V 50/60 Hz	←
Temp	Operating	5°C to 40°C (41°F to 104°F)	←
	Storage	-20°C to 60°C (-4°F to 140°F)	←
Humidity		30% to 80%	←

Sampling		4:2:2 8-bit	←
	Y	13.5 MHz	←
	R-Y/B-Y	6.75 MHz	←
Compression		3.3:1 DCT based intraframe coding	←
Data rate		50 Mbps	←
Frequency response (SDI in, analogue out)	Y	0 to 4.5 MHz, +1.0 / -2.0 dB	←
	R-Y/B-Y	0 to 2 MHz, +/-1.0 dB	←
S/N (SDI in analogue out)		55 dB	←
SDI I/O (unbalanced)		Option	←
Analogue I/O (75 ohms un-balanced) balanced)	Composite	1Vp-p	←
	Y/C:	Y: 1Vp-p, C: 0.3Vp-p (Burst)	←
	Component	Y: 1Vp-p R-Y / B-Y: 0.7Vp-p	← (out) ← (out)
	Reference	0.45Vp-p (loop)	←

Video Control Adjustment range

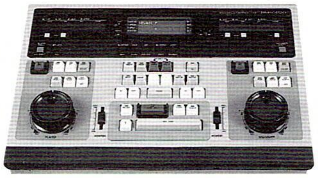
System sync phase	±3 nanoseconds or more	←
System SC phase	360 degrees or more	←
Video phase	±1.0 nanoseconds or more	←
Video level	±3 dB or more (remote required)	←
Chroma level	±3 dB or more (remote required)	←
Setup level	0 mV or less to 100 mV or more (remote required)	←

Audio

System	2ch PCM, 48 kHz, 16-bit	←
Frequency response	20 to 20,000 Hz +1/-1.5 dB	←
Dynamic range	Less than 85 dB (at 1 kHz)	←
Distortion	Less than 0.1% (1 kHz at operation level)	←
Crosstalk	Less than 75 dB (at 1 kHz)	←
Headroom	20 dB	←
Emphasis	Automatic switching in play	←
Wow and flutter	Below measurable level	←
SDI I/O	Option	←
Analogue input	Line: -6 / 0 /+4 dB high impedance balanced	←
Analogue output	Line: -6 / 0 /+4 dB low impedance balanced	←
Monitor	-6 dB low impedance balanced	←
Headphones	Infinity to -17 dBs, 8 ohms	←

System Products

RM-G820E
Pre-read Editing Controller

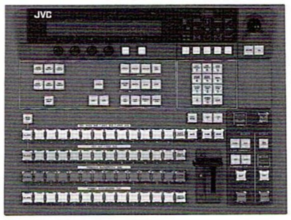


See page 53.

RM-G870E
Multi-event A/B Roll
Editing Controller

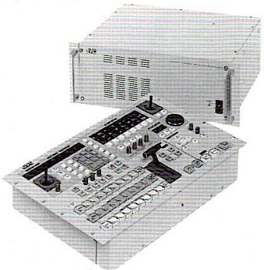
See page 54.

KM-5000E
Digital Vision Mixer



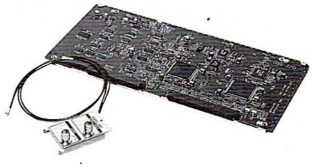
See page 19.

KM-3000E
Component Vision Mixer



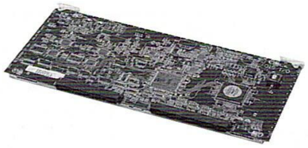
See page 58.

SA-D50U
SDI Output for BR-D50/51E

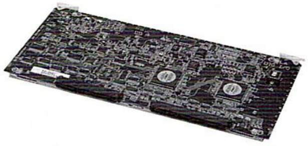


SA-D80U
SDI I/O for BR-D80E

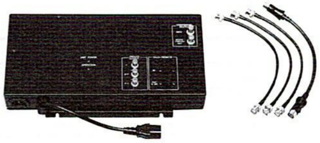
SA-D52U
SDI Output for BR-D52E
(embedded audio)



SA-D92U
SDI I/O for BR-D92E
(embedded audio)



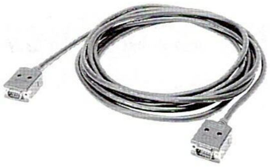
IF-C2000SDE
SDI Input for JVC
Component Monitor



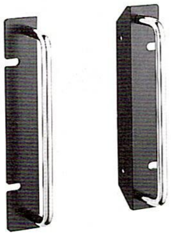
See page 89.

RM-G22U
TBC Remote Control for
DIGITAL S

VC-G9050U
9-pin Remote Cable (5 m)
for Edit Control



SA-K67U
DIGITAL S Rack Mount



DS-124
2-hour Tape

JVC
DS124
DIGITAL S
PROFESSIONAL
DS124

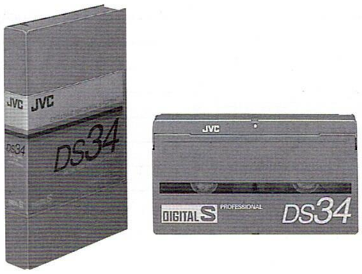
DS-104
104-minute Tape

JVC
DS104
DIGITAL S
PROFESSIONAL
DS104

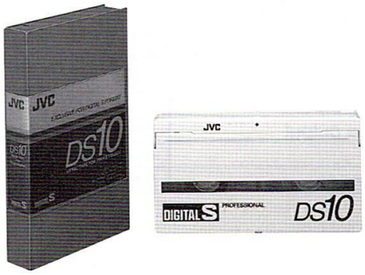
DS-64
64-minute Tape

JVC
DS64
DIGITAL S
PROFESSIONAL
DS64

DS-34
34-minute Tape


JVC
DS34
DIGITAL S
PROFESSIONAL
DS34

DS-10
10-minute Tape

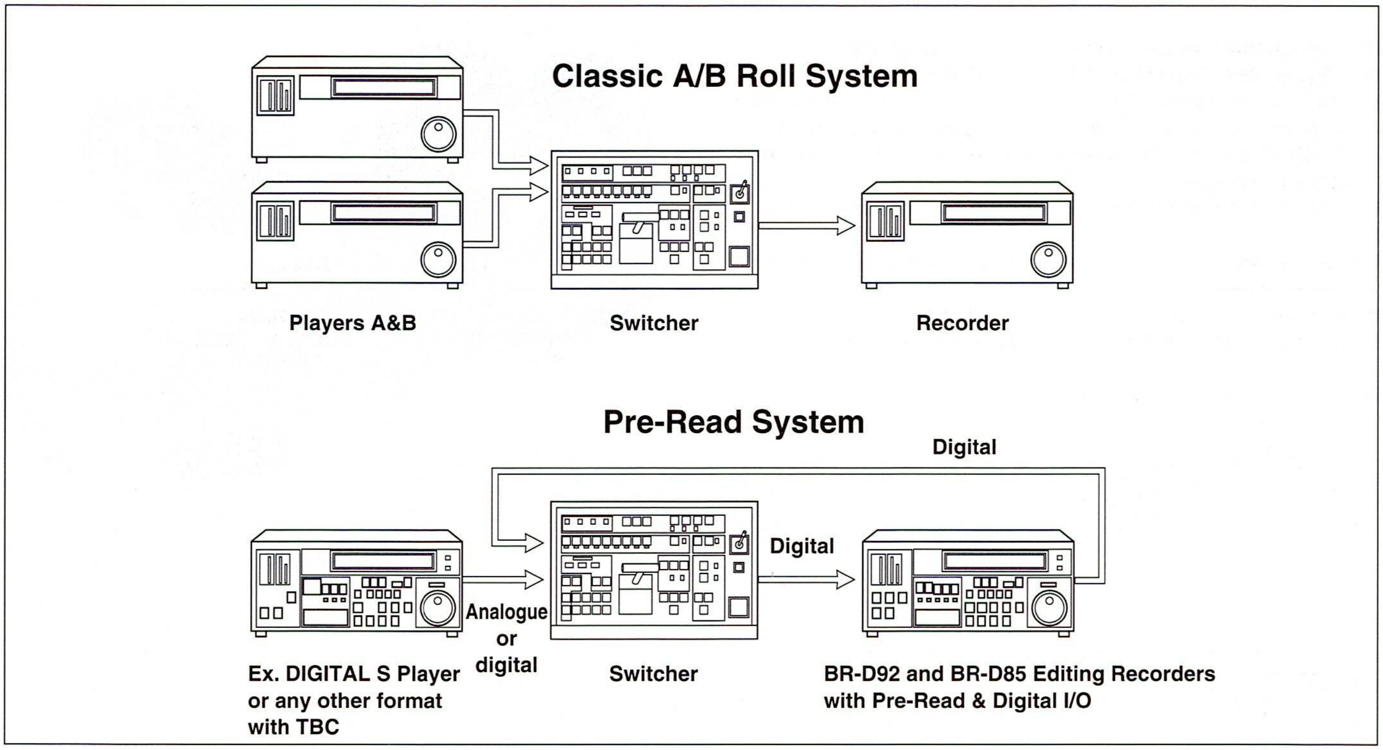

JVC
DS10
DIGITAL S
PROFESSIONAL
DS10

DCL-5
Cleaning Tape

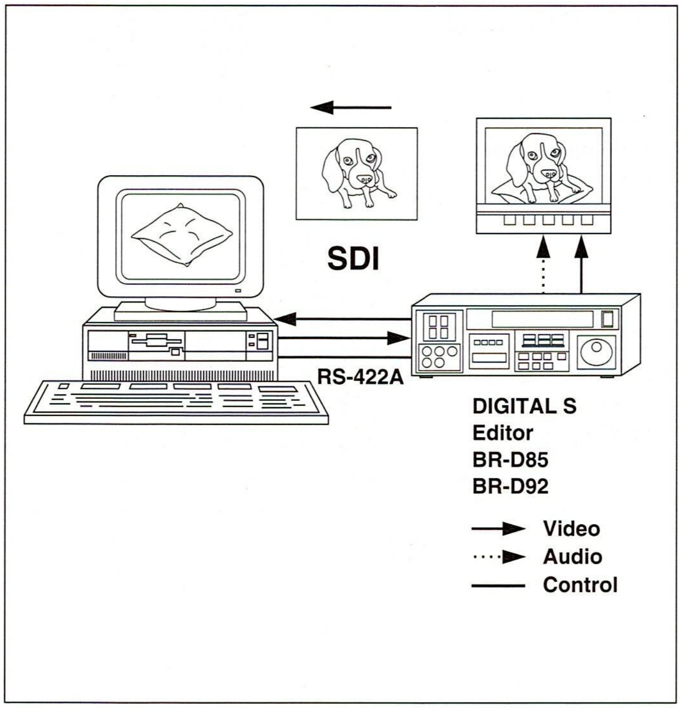
JVC
DCL-5
Head Cleaning Cassette
for DIGITAL S VCRs
DIGITAL S
Head Cleaning Cassette

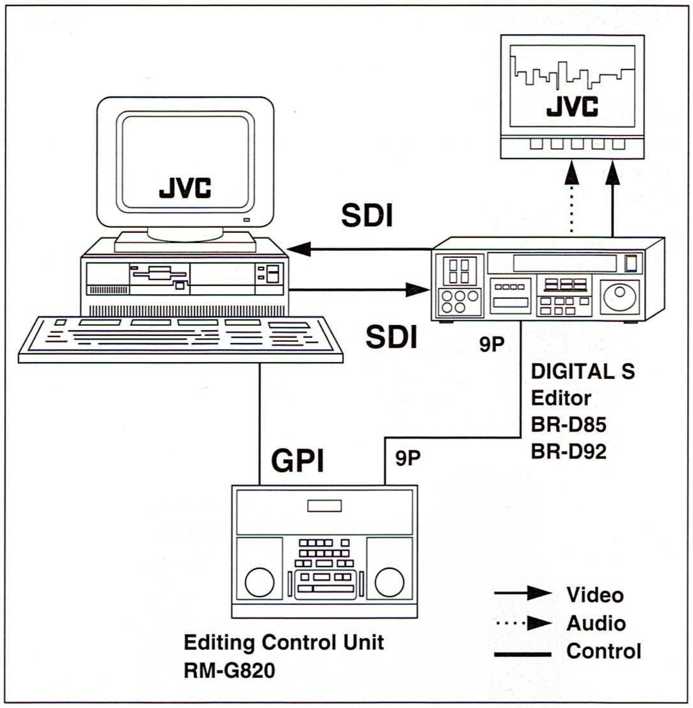
Pre-Read System Configuration

Pre-read A/B roll


Classic A/B Roll System
Players A&B
Switcher
Recorder
Pre-Read System
Digital
Digital
Analogue or digital
Ex. DIGITAL S Player or any other format with TBC
Switcher
BR-D92 and BR-D85 Editing Recorders with Pre-Read & Digital I/O

Pre-read Computer Graphics


SDI
RS-422A
DIGITAL S Editor BR-D85 BR-D92
Video
Audio
Control


JVC
JVC
SDI
SDI
9P
DIGITAL S Editor BR-D85 BR-D92
GPI
9P
Editing Control Unit RM-G820
Video
Audio
Control

The BR-D85 can serve as source and recorder; while computer graphic software controls the BR-D85 and performs layering of graphic images.

A Character Generator can supply overlay text and graphics, in this case performing keying and superimposition triggered by the edting control unit.

Dockable DV Recorder

BR-DV10E

- **High-quality mini DV component digital recording**
- **High-quality, 2-channel 16-bit 48 kHz PCM audio**
- **Lightweight, compact and capable of direct connection with professional camera. Use with a JVC professional camera KY-D29E and KY-19E to record the best quality that the DV format can offer**
- **2-channel, balanced audio input (XLR connectors)**
- **Y/C and composite video outputs**
- **Aluminium die-cast body for improved durability, strength and reliability**
- **Reshoot function for easily retaking bad scenes**
- **Recording time and remaining tape time (min.) display capability**
- **60 minutes record time with miniDV tape.**

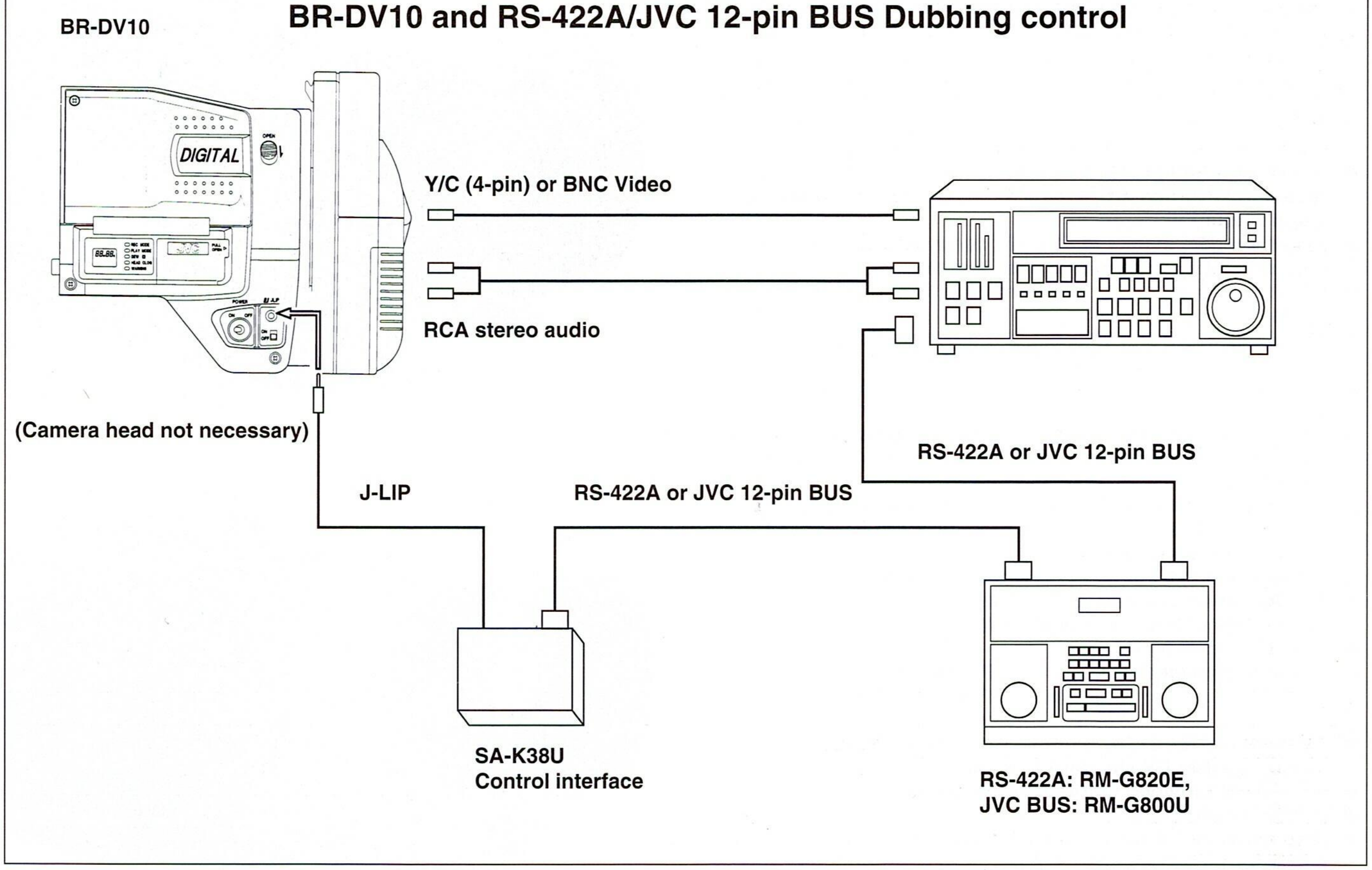
(Shown with optional camera head)

Format	DV format
Signal format	PAL
Video signal recording format	Digital component recording
Usable tape	Mini DV tape
Tape speed	18.8 mm/sec
Recording time	Max. 60 minutes (when using DVM-60)
Fast forward/Rewind time	Approx. 90 sec. (when using DVM-60)
Power supply	DC 12 V (10.5 to 15 V)
Power consumption	11.3 W (25 W with KY-19)
Power for camera portion	Max. 12 V, 2 A (Max. 24 W)
Weight	Approx. 2.3 kg (main unit)
Dimensions	235 (W) × 245 (H) ×130 (D) mm
Operating temperature	0°C to 40°C
Operating humidity	35% to 80%
Storage temperature	-20°C to 60°C

Video signal system	
Camera input	Y: 1 Vp-p, 1 kohm, unbalanced (50-pin connector) R-Y/B-Y: 0.7 Vp-p, 1 kohms, unbalanced
Video output	1 V p-p, 75 Ohms, unbalanced, BNC
Y/C output	Y: 1 Vp-p, 75 Ohms, unbalanced, 4P C: 0.3 Vp-p (Burst), 75 Ohms, unbalanced
Horizontal resolution	More than 500 lines
Audio signal system	
No. of channels	PCM: 2 channels (48 kHz)
50-pin connector input	–20 dBs, 10 kohms, balanced
Line input	+4 dBs, 10 kohms, balanced, XLR3P –60 dBs, 3 kohms, balanced, XLR3P
Line output	–8 dBs, 1 kohm, unbalanced, RCA
Earphone output	8 ohms, 3.5 mm minijack
Frequency characteristics:	200 Hz to 10 kHz
Audio S/N	More than 48 dB
Accessories (included)	
Handle x 1	
Top cover x 1	
Screws x 4	

BR-DV10E

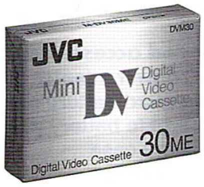
BR-DV10 and RS-422A/JVC 12-pin BUS Dubbing control


BR-DV10
DIGITAL
Y/C (4-pin) or BNC Video
RCA stereo audio
(Camera head not necessary)
J-LIP
RS-422A or JVC 12-pin BUS
RS-422A or JVC 12-pin BUS
SA-K38U
Control interface
RS-422A: RM-G820E,
JVC BUS: RM-G800U

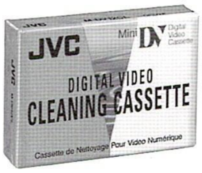
MINI DV Tape

JVC
Mini DV
Digital Video Cassette
60ME
Digital Video Cassette

MDV-30 MEAE
30-minute Tape


JVC
Mini DV
Digital Video Cassette
30ME
Digital Video Cassette

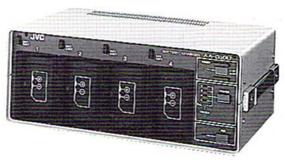
MDV-60 MEAE
60-minute Tape


JVC
Mini DV
DIGITAL VIDEO
CLEANING CASSETTE
Cassette de Nettoyage Pour Vidéo Numérique

MDV-12CL
DV Cleaning tape

Optional Accessories

AA-P250E
AC Power Adapter



AA-G10E
Battery Charger/AC Adapter

JVC BATTERY PACK
NB-G1U
12V
2.2Ah

NB-G1U
Battery

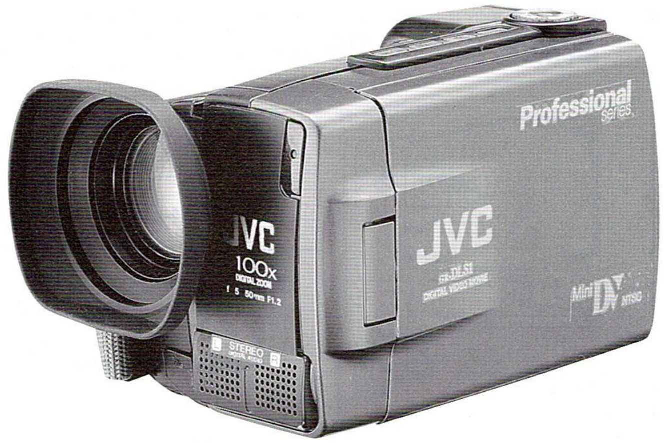
SA-K38U
Dubbing Control Interface
for RM-G800U, RM-G820E

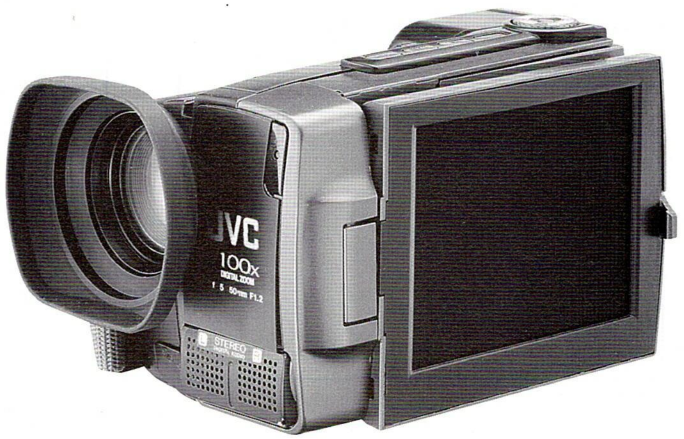
Compact Progressive Digital Still Camera, DV Camcorder

GR-DLS1E

Mini DV PAL

- Progressive scan still picture and progressive scan video; 500 TV lines horizontal, 560 TV lines vertical resolution. In progressive scan 450K pixel 1/3" IT CCD provides quality equivalent to 900K pixel CCD
- Progressive CCD filter based on complementary colours (W/ G/Ye/Cy) allows full vertical luminance resolution of 560 lines TV lines and high sensitivity, because luminance signal is produced from each row of pixels
- High bandwidth processing retains full 500 TV line horizontal resolution (Normal processing must cut high resolution to avoid colour interference)
- Bright images, thanks to F1.2 10x zoom lens (5-50 mm) and high sensitivity progressive filter system
- 5 lux sensitivity, 2.5 lux in progressive scan (1/25 shutter) mode
- 40x digital zoom and 100x super digital zoom with spline interpolation for smooth diagonal images
- 2-channel 16-bit 48 kHz audio or 4-channel 12-bit 32 kHz audio
- Up to 600 image progressive scan digital still capacity on one DV tape in snapshot mode, 100,000 per tape in progressive video mode
- No docking station or capture board required when using JLIP terminal to transmit serial data Digital Still images to standard PC serial port
- 10x positionable zoom on previously recorded images
- Random assemble edit (RAE) mode
- Wide range of in-camera digital effects
- RS-232 control by PC
- Software provided: Editing -- JLIP Video Producer
  Capture -- JLIP Video capture 2.0
  Paint -- Photosuite SE
- DV standard IEEE1394 terminal for lossless digital video output to other DV standard devices
- 4" LCD colour video monitor, audio speaker
- Colour viewfinder also
- High capacity 1.4 Ah lithium ion batlery; with viewfinder use and external battery case 3 hours, with viewfinder use and optional high capacity battery case 6 hours
- Auto lens cover and power on / off
- Remote control provided
- Compact size, 780 grams with battery and tape





Format	Mini DV digital component recording
Audio recording format	PCM digital stereo
Image sensor	1/3" Progressive Scan CCD, 450,000 pixels
Lens	F1.2 (f = 5.0 - 50 mm)
Monitor	4" colour LCD monitor
Viewfinder	0.55 inch colour
Continuous recording time	80 min. (LCD monitor ON), 100 min. (viewfinder ON), 9 hours (using the optional battery case and belt-holder type battery)
Terminals	DV (IEEE 1394 compliant), S, AV, Edit JLIP (also used for RS-232C digital still data transfer)
Dimensions (W x H x D)	86 x 86 x 145 mm (excluding lens hocd)
Weight	Approx. 780 g with battery and tape
Power supply	DC 6.3 V (AC adapter), DC 7.2 V (batteries)
Power consumption	8.2 W (LCD monitor ON), 6.3 W (viewfinder ON)

Provided accessories

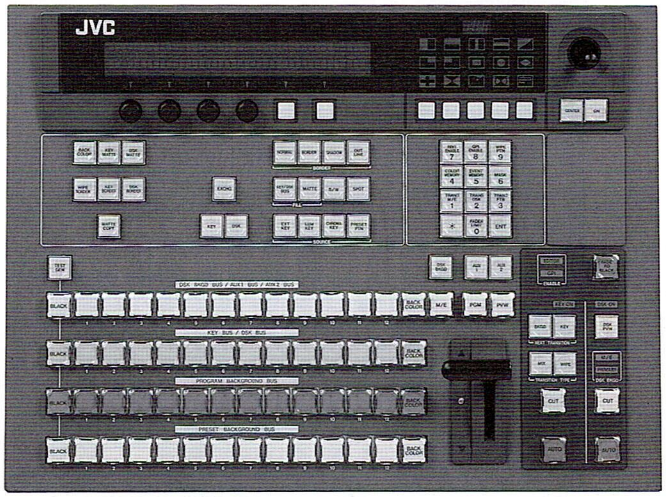
- AC power adapter & battery charger
- Standard battery pack (BN-V814) x 2
- Long-life battery pack (BN-V856)
- Battery case
- Lens hood
- Shoulder strap
- Software (CD-ROM) -- JLIP Video Capture Ver. 2.0, JLIP video Producer, MGI PhotoSuite SE
- PC cable
- S-video cable
- AV cable
- Edit cable
- DC power cable
- MiniDV cassette
- Wireless remote control
- Battery for remote control
- SCART/RCA adapter

Multi-format Component Digital Vision Mixer

KM-5000E

COMPONENT DIGITAL
4:2:2

- **Exceptional picture quality from component digital processing (CCIR Rec 601 4:2:2 digital format)**
- **Four different input modules available for various applications: component analogue, component parallel digital (Rec 656), component serial digital (Rec 656), and composite analogue (PAL)**
- **Up to 14 primary inputs are possible, including colour bar and back colour (input modules optional)**
- **Up to 7 busses (KEY, PGM, PST, DSK, DSK BKGD, AUX1, AUX2) (AUX1 AND AUX2 Optional)**
- **Three slots for PGM output**
- **16-event memory**
- **Serial interface for VTR editors (RS-422A)**
- **2-unit modular design: main unit and control unit**
- **6 colour matte generators**
- **DVE interface possible**
- **Liner key processing**
- **All input chroma key for KEY and DSK (Standard)**
- **Priority change capability between KEY and DSK**
- **Border generator : Border, Shadow, Outline for KEY and DSK (Standard)**
- **Auto Digital Input phase correction (±64 μS)**



Video System	
Television standard	625/50
Digital video paths	8-bit resolution
Digital key paths	8-bit resolution
Digital mixer:	10-bit × 9-bit mixer with 18-bit precision: dither added to round to 8-bit out
Overall delay input/ programme output	3 line <delay <4 line
Signal processing video	4:2:2 in conformity with CCIR601

Inputs	
12 primary video inputs	
Analogue component (option):	EBU standard level Y :1.0 Vp-p Pb: 0.7 Vp-p Pr :0.7 Vp-p 3 × BNC 75 ohms
Parallel digital (option):	CCIR-656 parallel component 1 × D-sub 25-pin
Serial digital (option):	CCIR-656 serial component 1 × BNC 75 ohms
Analogue composite (option):	PAL-VBS 1.0 Vp-p 1 × BNC 75 ohms
6 external key inputs	
Analogue key (option):	VS 1 Vp-p or key 0.7 Vp-p and sync 0.3~4.0 Vp-p (switchable) 2 × BNC 75 ohms
Parallel digital (option):	CCIR-656 parallel component 1 × D-sub 25-pin
Serial digital (option):	CCIR-656 serial component 1 × BNC 75 ohms
Autophasing range:	+62.5 μs (delay) –64.0 μs (advance)
Gen-lock	
Composite analogue:	B.B. 0.45 Vp-p±30% 75 ohms or loop through 2 × BNC

Outputs	
Programme output (3 slots available for PGM) Preview output (1 slot available for PVW)	
Analogue component (standard):	EBU standard level Y 1.0 Vp-p Pb 0.7 Vp-p Pr 0.7 Vp-p level 2 outputs per 1 module 6 × BNC 75 ohms
Serial digital (standard):	CCIR-656 serial component 3outputs per 1 module 3 × BNC 75ohms
Parallel digital(option):	CCIR-656 parallel component 2 outputs per 1 module 2 × D-sub 25-pin
Analogue composite (standard):	VBS 1.0Vp-p 2 outputs per 1 module 2 × BNC 75 ohms
Key output(1 slot available)	
Analogue (option):	Y 1.0 Vp-p 1 × BNC 75 ohms
Serial digital (option):	CCIR-656 serial component 3 × BNC 75 ohms
Parallel digital (option):	CCIR-656 parallel component 2 × D-sub 25-pin
Aux-1,-2 outputs(each 1 slot available)	
Analogue component (option):	EBU standard level Y: 1.0 Vp-p Pb: 0.7 Vp-p Pr: 0.7 Vp-p 2 outputs per 1 module 6 × BNC 75 ohms
Serial digital(option):	CCIR-656 serial component 3 outputs per 1 module 3 × BNC 75 ohms
Parallel digital(option):	CCIR-656 parallel component 2 outputs per 1 module 2 × D-sub 25-pin
Analogue composite (option):	VBS 1.0 Vp-p 2 outputs per 1 module 2 × BNC 75 ohms
Black burst	0.45 Vp-p BNC 75 ohms

Interface	
12 tally outputs	dry contact or voltage supply (selectable) terminal
4 GPI inputs	input:TTL with optocoupler control for M/E, DSK, FTB, KEY, PRIORITY EXCHANGE
4 Serial communication ports	
Control unit:	RS-422 or RS-232C D-sub 9-pin
Editor:	RS-422 or RS-232C D-sub 9-pin
Audio:	RS-422 or RS-232C D-sub 9-pin
External:	RS-422 or RS-232C D-sub 9-pin

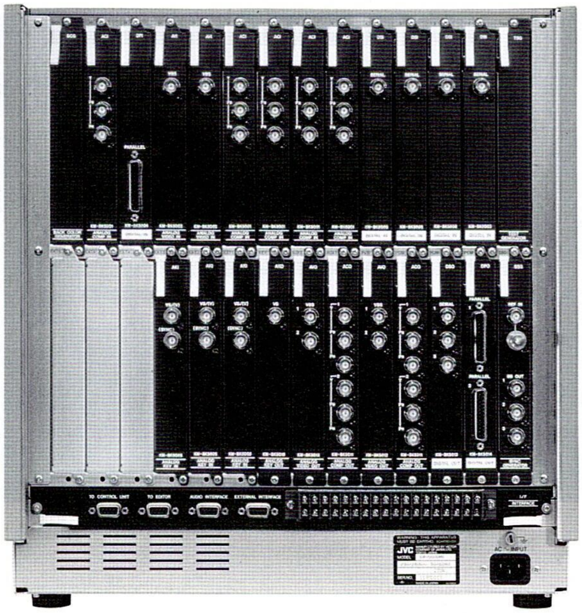
Analogue component inputs/outputs	
Frequency response	Y:100 kHz to 5.75 MHz ±0.5 dB Pb/Pr. 100 kHz to 2.75 MHz ±0.5 dB
S/N (p-p/ma)	Y:56 dB (200 kHz to 5 MHz)
Y/Pb/Pr timing	less than 25 ns

General	
Power requirement:	
Main unit	200 V to 240 V AC±10% 50/60 Hz
Control unit	100 V to 240 V AC±10% 50/60 Hz
Power consumption:	
Main unit	max. 220 W
Control unit	max. 30 W
Operating temperature	5°C to 40°C
Humidity (relative):	10% to 90% (noncondensing)
Weight	
Main unit	30.0 kg
Control unit	7.3 kg
Dimension (W × H × D)	
Main unit	482 × 456.5 × 563 mm
Control unit	482 × 83 × 355 mm

System Accessories

KM-5000E

COMPONENT DIGITAL
4:2:2

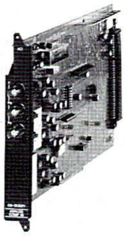


The KM-5000E mainframe is equipped as standard with 3 output modules, KM-BK5011E (analogue composite output), KM-BK5012E (analogue component output) and the KM-BK5013E (digital serial output). Also included are, 6 colour generators, 1 black/test pattern generator, 1 back colour generator and a sync generator. Any of the optional modules can be installed in the mainframe. The mix and number of these modules can vary according to your requirements.

The mixer has a maximum capacity of the following slots:
12 inputs,
6 key in,
3 programme out,
1 preview out,
2 auxiliary out,
1 key out.

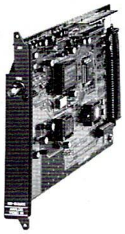
KM-BK5001

Analogue component input module



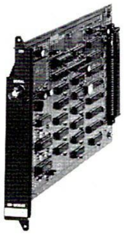
KM-BK5002

Analogue composite input module



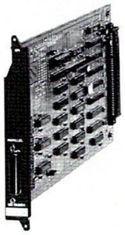
KM-BK5003

Digital serial input module



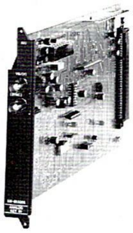
KM-BK5004

Digital parallel input module



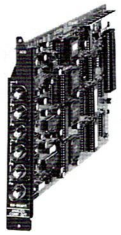
KM-BK5005

Analogue key input module



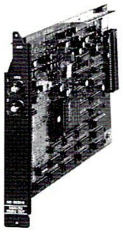
KM-BK5011

Analogue component output module



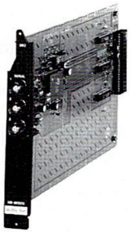
KM-BK5012

Analogue composite output module



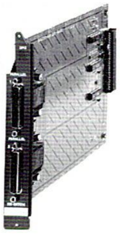
KM-BK5013

Digital serial output module



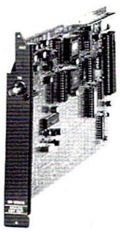
KM-BK5014

Digital parallel output module



KM-BK5015

Analogue key output module



Non-Linear Editing System

TimeGate

MW-S1000E

COMPONENT DIGITAL 4:2:2

- **High picture quality; all 4:2:2 processing video path from input to output and low compression ratios.**
- **All effects real time (wipes, keys, Genie 3D DVE, InscriberCG, Etc.)**
- **Turnkey systemisation; all software, hardware in one unit with JVC Service and support.**
- **Open Architecture conforming to industry standards for rapid modular upgrade of both hardware and software. (OS: Windows NT 4.0; Buses: PCI and Matrox Movie 2; Microsoft Direct Show; Open DML consortium extended AVI video and audio stream files).**

General	
Standards supported:	PAL, ITU-R 601
Output quality:	Offline, online (Digital S)
Type of recording:	M-JPEG, 30:1 to 4:1 for A/B roll
Editing Media	
Standard:	One internal array of 3 x 4GB ultrawide differential SCSI (FAST-40) hard disks
Optional:	4 external arrays from an approved list
Total drives:	15 drives.
Tape formats supported for hybrid operation:	Any which can be controlled by RS-422 using JVC/Sony protocols.
Recording Time per media	
Recording time per GB at highest quality:	3.3 minutes (Digital-S quality)
Recording time per GB at standard quality:	7 minutes (better than S-VHS quality)
Recording time per GB at lowest quality:	25 minutes (off-line quality)
Hardware desktop system:	PC-based Pentium® platform with PCI and Matrox Movie 2 busses, 64MB RAM, 2.1GB (IDE) internal drive. Windows NT 4.0., Processing / storage hardware
Optional hardware:	Genie 3D DVE, Digilinx SMPTE 259M SDI I/O
Standard Software	Proprietary Media Workstation NLE Software, third party Direct Show.
Optional software supported:	Third party PhotoShop, and any third party software approved by JVC
Operation/Display	
User interface:	One video monitor, one 20" computer display (864 x 1152 or above), Keyboard and mouse.
Clip Search:	Searched/sorted by reel number and timecode, file name, date, and file extension (.edl, .wav, .tak, tga, etc.), All clips are available to all projects.
Keyboard shortcuts:	Supported
Screen layout:	Customised by scaling window sizes and having multiple windows open such as galleries and timelines.
Display for stored/library clips:	Icons
Primary display for programme assembly:	Storyboard, timeline
Sizes of picture display:	Full screen
timings displayed:	HMSF, absolute time
Synchronisation / Machine Control:	Two external machines for recording or insert editing via RS422 and Re-recording at a higher resolution using internal EDL supported. The system internally regenerates broken timecode.
Timecode formats supported:	LTC, VITC
Rates used for synchronisation (fps):	25
Picture Recording:	Batch recording with user definable handles is supported, depending on drive capacity and the third party software used.
Analogue inputs:	[standard] 1 x Y/C, 1 x composite 1 x R-Y, Y, B-Y
Digital inputs:	[optional] SMPTE 259M
Frames recorded:	Every frame
Fields per frame:	Two
No. of pixels:	720 x 486 (NTSC), 720 x 576 (PAL)
Motion control:	Joy stick, jog, shuttle, locate to marker, goto any time, random access on timeline
Analogue outputs:	[standard] 1 x Y/C, 1 x composite 1 x R-Y, Y, B-Y
Digital outputs:	[optional] 1 x SMPTE 259M
No. of simultaneous replay channels:	Two
Timecode output (fps) :	25

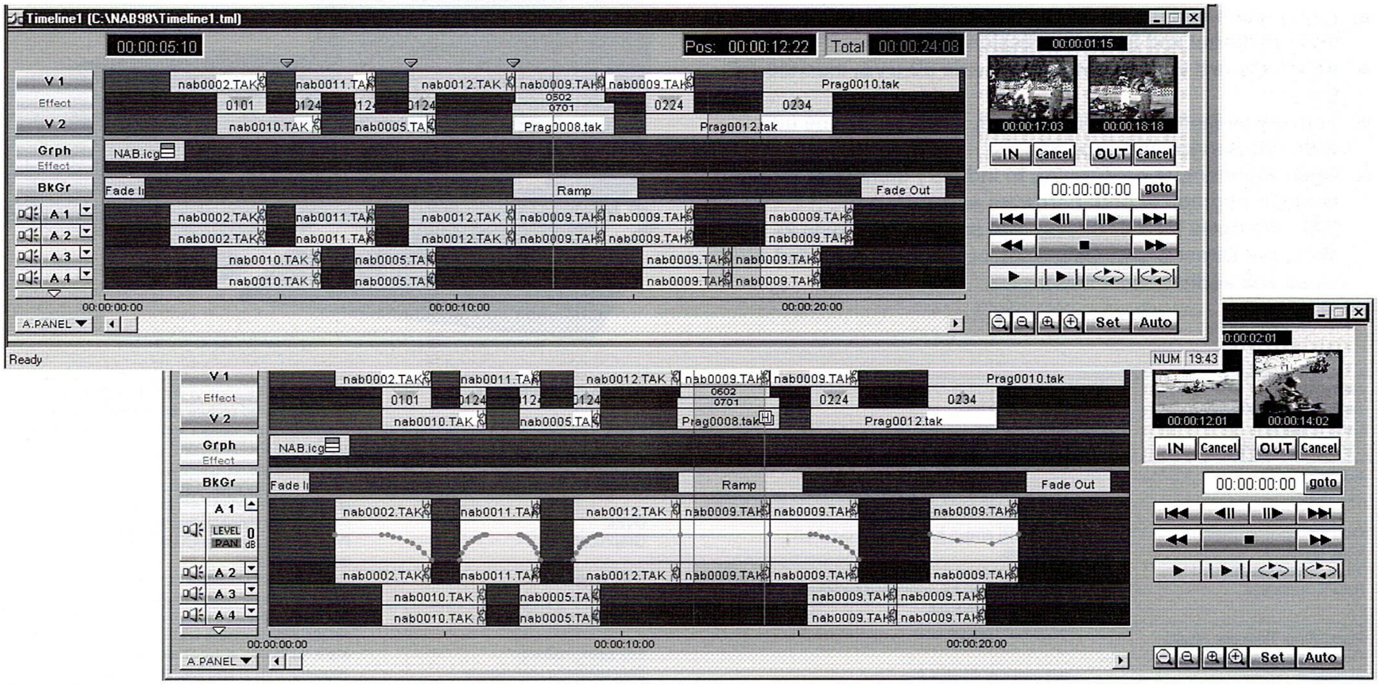
Picture Editing/Effects:	There are 32 stages of undo; edits can be made between mixed picture resolutions.
Transitions are real time, customised by:	Transition time, border width/colour/softness, DVE location/aspect ratio, and page turn direction/ radius/number of corners.
Special editing/effects features include:	Colour compensation including colour phase, chroma gain, video gain and video setup.
DVEs:	Provided by Pinnacle hardware and are real time.
Graphics/titles:	Provided by InscriberCG third party software, uncompressed.
Editing types:	Cut, insert, insert black copy, assemble, tag edit;
For tape to tape editing:	Insert to record machine material
Basic transition types:	Approximately 100 including fades, dissolves, simple wipes, matrix wipes, clock wipes
Edit point marking:	Mark on the fly, enter timecode in stop
Shot trimming techniques:	Jogging, trim in and out, drag nowline
DVEs:	[standard] linear keys, chroma keys, approximately 20 2D DVEs including slide, zoom and mosaic, [optional] 3D DVEs including page turn, rotation, splash, sphere
Graphics/Titles:	[standard] InscriberCG (with .icg file format)
Layers of effects/graphics:	Two video, one graphic and one background layer
Audio	
Sampling rates (kHz):	48
Analogue inputs:	[standard] 4 ch +4 dBs, 20 kohms
Anaolgue outputs:	[standard] 4 ch +4 dBs, 50 ohms
Digital inputs/outputs:	[standard] 4 ch AES/EBU
No. of editing tracks:	8
No. of simultaneous channels:	[standard] 8
Edit point location techniques:	On the fly, click & drag, waveform
Level/mix functions:	Fade in/out, crossfades, track level, clip level, stereo mixdown
EDL/Data File Management	
Number of EDL events in a programme:	999.
EDLs supported:	Sony BVE 9100
Media File Import/Export	
File formats supported are:	
Video:	Extended AVI, standard AVI
Audio:	WAVE (48 k,16-bit, mono)
Graphics:	TGA, BMP
Archiving	
Recommended archiving devices:	MO and ZIP drives for parallel interface, Digital S.
material archived:	Selectable source or programme
Configuration	
Standard operational system:	JVC Media Workstation MW-S1000 Desktop unit 2D DVE and Character Generator, 12GB AV hard drive array, Keyboard, mouse 64MB RAM, 3.5" 1.44 MB floppy disk drive, CD-ROM Drive, 1.2 GB system hard drive.
Options:	MW-D10 Serial Digital I/O, MW-D30 3D DVE
Dimensions	
Size:	420 (W) x 232 (H) x 622 (D) mm
Weight:	Approx. 23 kg or less
Power Consumption:	Approx. 220 W
Other recommended components	External HDD array systems, Speaker system, 20" computer display (1152 x 864 required), JVC BM-H2000E high resolution 20" video monitor, JVC BR-D80E, BR-D85E or BR-D92E Digital S VTR, JVC SA-D80U SDI I/O for BR-D80E/85E. JVC SA-D92 SDI I/O for BR-D92E.

**"Windows NT 4.0" and "Direct Show" are trademarks of Microsoft*

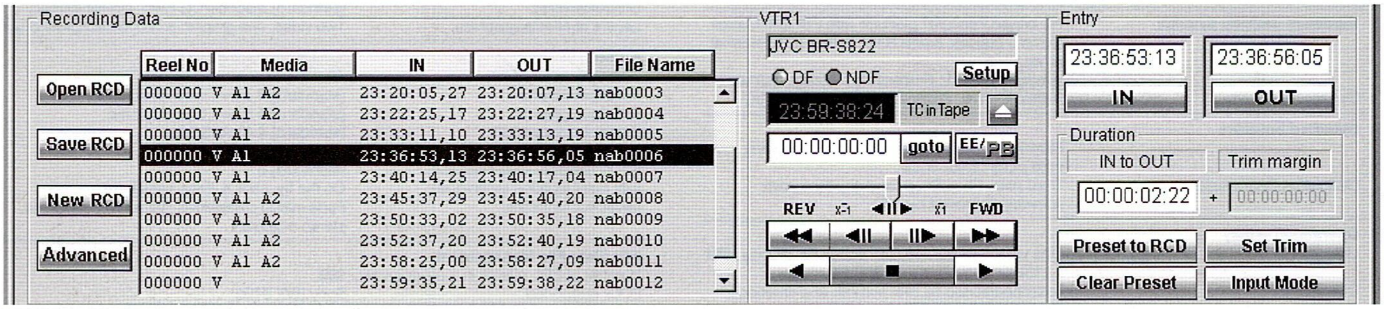
**"Pentium®" is a trademark of Intel.*

MW-S1000E

COMPONENT DIGITAL 4:2:2

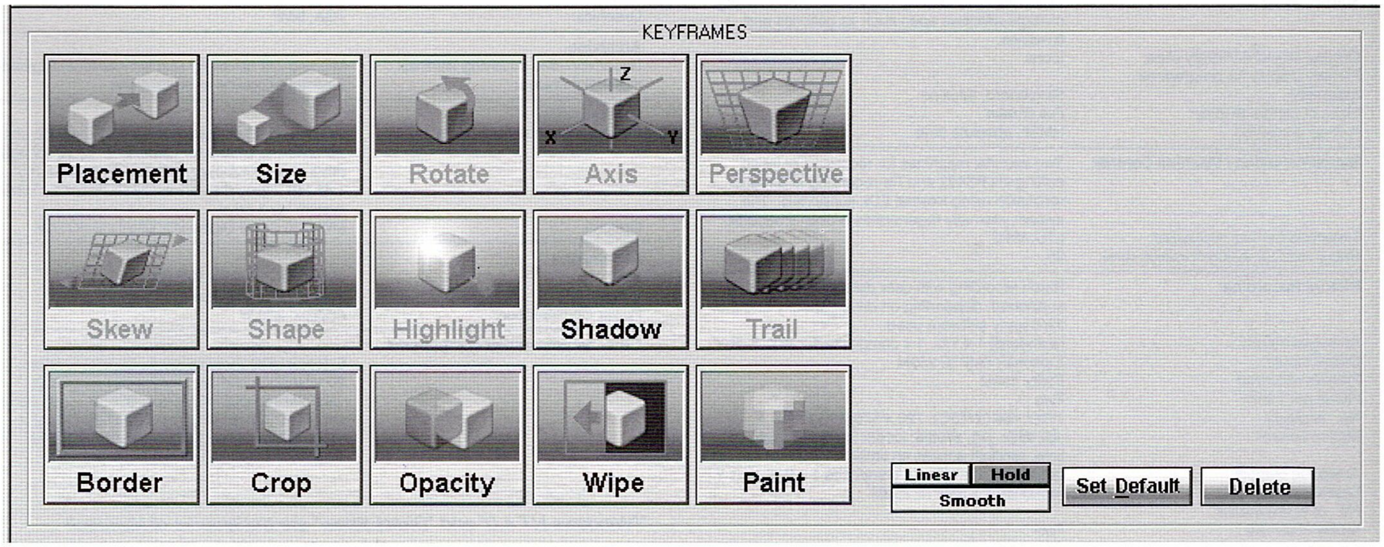

Timeline1 (C:\NAB98\Timeline1.tml)
00:00:05:10
Pos: 00:00:12:22
Total 00:00:24:08
V 1
Effect
V 2
Grph
Effect
BkGr
A 1
A 2
A 3
A 4
LEVEL
PAN
nab0002.TAK
nab0011.TAK
nab0012.TAK
nab0009.TAK
nab0010.TAK
nab0005.TAK
Prag0010.tak
Prag0008.tak
Prag0012.tak
NAB.icg
Fade In
Ramp
Fade Out
00:00:00:00
00:00:10:00
00:00:20:00
A.PANEL
Ready
NUM 19:43
00:00:01:15
00:00:17:03
00:00:18:18
IN
Cancel
OUT
Cancel
00:00:00:00
goto
Set
Auto

Dual timeline


Recording Data
Open RCD
Save RCD
New RCD
Advanced
VTR1
JVC BR-S822
○ DF ● NDF
Setup
23:59:38:24
TC in Tape
00:00:00:00
goto
EE/PB
REV
FWD
Entry
23:36:53:13
IN
23:36:56:05
OUT
Duration
IN to OUT
00:00:02:22
Trim margin
00:00:00:00
Preset to RCD
Set Trim
Clear Preset
Input Mode

Reel No	Media	IN	OUT	File Name
000000	V A1 A2	23:20:05,27	23:20:07,13	nab0003
000000	V A1 A2	23:22:25,17	23:22:27,19	nab0004
000000	V A1	23:33:11,10	23:33:13,19	nab0005
000000	V A1	23:36:53,13	23:36:56,05	nab0006
000000	V A1	23:40:14,25	23:40:17,04	nab0007
000000	V A1 A2	23:45:37,29	23:45:40,20	nab0008
000000	V A1 A2	23:50:33,02	23:50:35,18	nab0009
000000	V A1 A2	23:52:37,20	23:52:40,19	nab0010
000000	V A1 A2	23:58:25,00	23:58:27,09	nab0011
000000	V	23:59:35,21	23:59:38,22	nab0012

VTR control

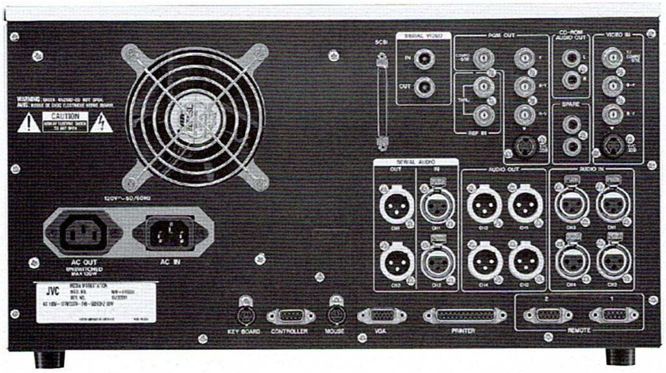

KEYFRAMES
Placement
Size
Rotate
Axis
Perspective
Skew
Shape
Highlight
Shadow
Trail
Border
Crop
Opacity
Wipe
Paint
Linear
Hold
Smooth
Set Default
Delete

Example effect control

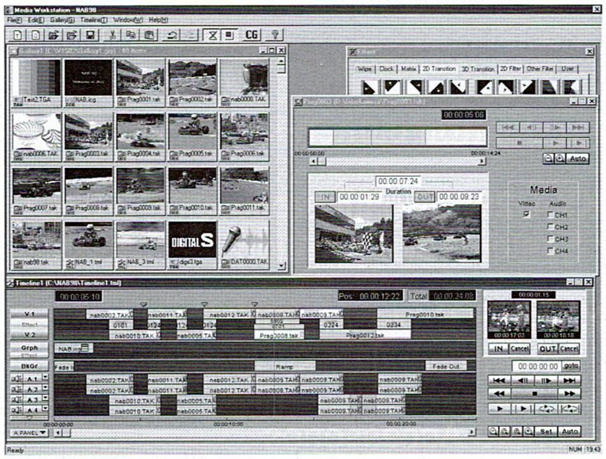
Non-Linear Editing System

MW-S1000E

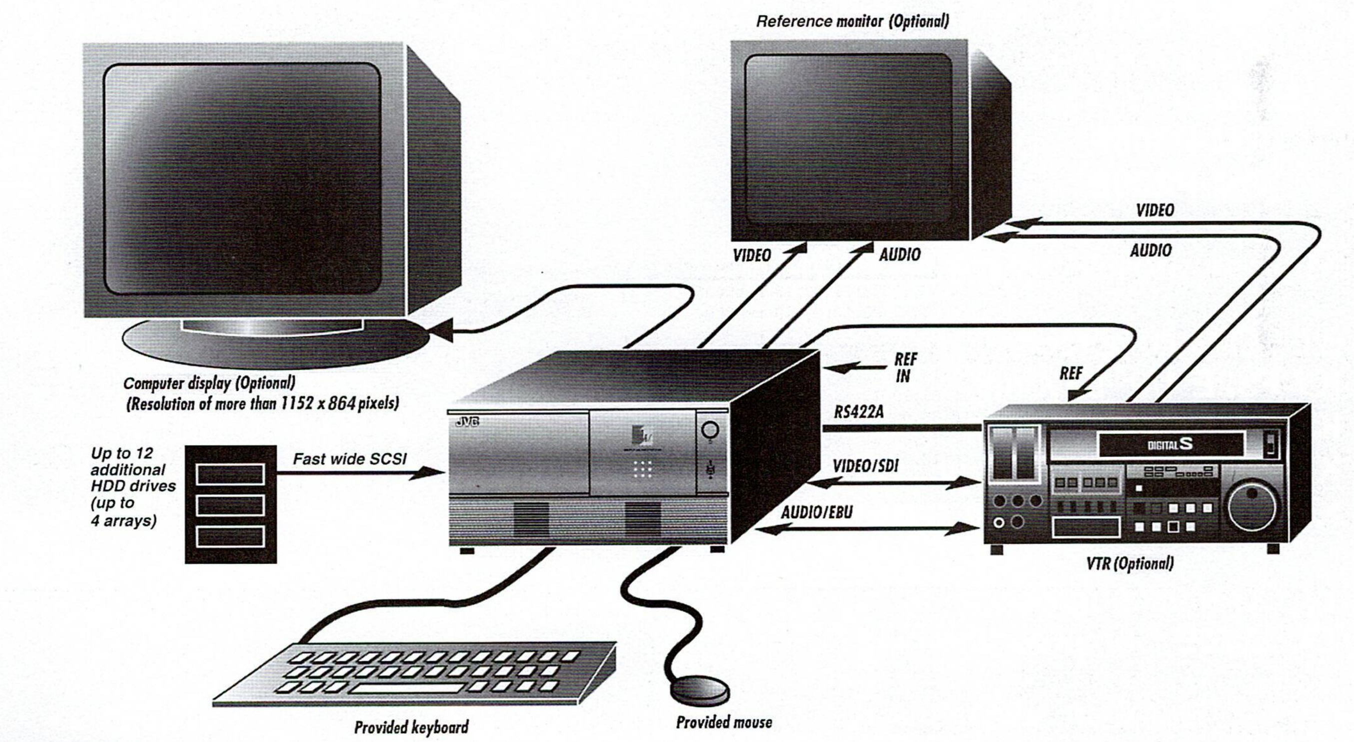
COMPONENT DIGITAL
4:2:2


SCSI
SERIAL VIDEO
IN
OUT
PGM OUT
CC-ROM AUDIO OUT
VIDEO IN
REF IN
SPARE
SERIAL AUDIO
AUDIO OUT
AUDIO IN
CAUTION
AC OUT
AC IN
JVC
KEY BOARD
CONTROLLER
MOUSE
VGA
PRINTER
REMOTE

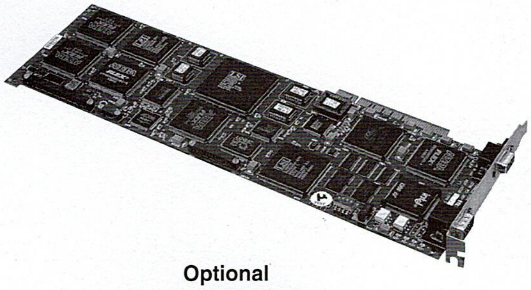
Comprehensive connections


Media Workstation - NAB98
File(F) Edit(E) Gallery(G) Timeline(T) Window(W) Help(H)
CG
Wipe
Clock
Matrix
2D Transition
3D Transition
2D Filter
Other Filter
User
00:00:07:24
Duration
IN
OUT
Auto
Media
Video
Audio
CH1
CH2
CH3
CH4
V 1
Effect
V 2
Grph
BkGr
A 1
A 2
A 3
A 4
Ramp
Fade Out
Cancel
Set
Ready

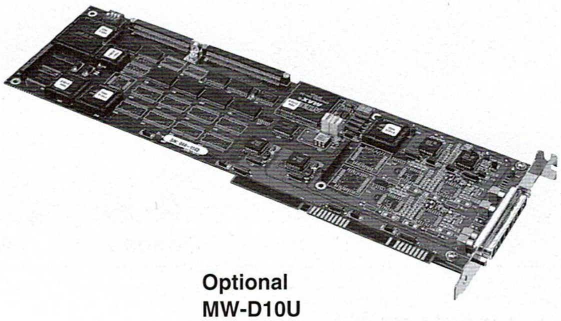
Typical editing screen


Reference monitor (Optional)
VIDEO
AUDIO
VIDEO
AUDIO
REF IN
REF
RS422A
VIDEO/SDI
AUDIO/EBU
Computer display (Optional)
(Resolution of more than 1152 x 864 pixels)
Up to 12 additional HDD drives (up to 4 arrays)
Fast wide SCSI
JVC
DIGITAL S
VTR (Optional)
Provided keyboard
Provided mouse

Typical System



Optional
MW-D30U
3D DVE Board



Optional
MW-D10U
SDI Input/Output Board

Cameras

Production cameras

KY-D29E Digital processing 2/3˝ CCD 25
System configuration 26

KY-19E Professional 1/2˝ CCD 27
System configuration 28

Camera Accessories 29

Remote Power/Control
Triaxial system
RM-P270E 30
Control Panels
Multicore systems
RM-P300E 31
RM-P200E 31

Multi-purpose cameras

3 CCD Multi purpose
KY-F32E 1/2" bayonet 32
KY-F50E 2/3" C mount 33
KY-F55BE 1/3" C mount 34
KY-F58E 1/3" C mount separate head 35

1 CCD Multi purpose
TK-1270E Computer Imaging 36

Pin configuration, accessories 37

CCTV Cameras

Colour 105
Black and White 110

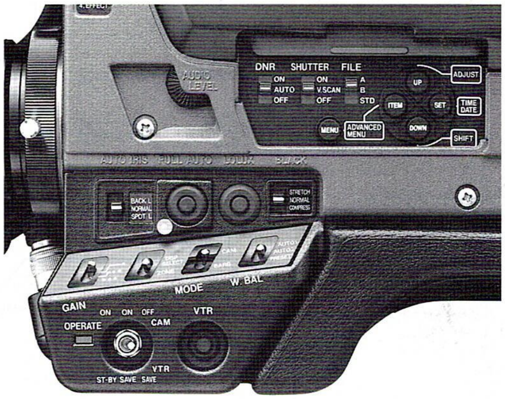
Digital Processing Camera

KY-D29E

- 3D digital noise reduction cancels out random noise , without undesired lag, by comparing multiple frames together with motion detection, Outstanding 63 dB signal to noise ratio.
- Scanline Video processing DSP enables 3D DNR (Digital Noise Reduction), natural detail enhancement, and the elimination of CCD spot noise.
- Total 600% dynamic range is achieved for both dark areas and highlights, in part because signals are processed at 14-bit resolution to give essential DSP headroom. Exceptional reproduction of highlight colour is another strength. Multi-stream parallel digital signal processing creates an ultra smooth gamma curve, calculated using a true Log scale algorithm. The new "one touch" Black Stretch/Compress feature gives fast reproduction of shadow areas, or a contrasty look.
- "V-Plus" High vertical resolution mode utilizes 745 x 581 effective pixel 2/3" IT CCDs (760K pixels) with the highest pixel count in the industry. One out of three vertical pixels is integrated from the opposite field to increase vertical resolution without visible lag or sacrificing sensitivity. Horizontal resolution is 850 TV lines. CCD vertical smear level; a super low -125 dB.
- High sensitivity of F11 at 2000 lux gives creative flexibility and ease of lighting.
- Automatic shooting from 4 lux to 24,000 lux thanks to JVC's well known Full auto shooting (FAS) mode with continuous white balance. Super LoLux mode now provides outstanding reproduction down to 0.35 lux. In addition to the standard set-up, two scene files save advanced custom camera set-ups.
- Also: "Accufocus", Adjustable Gamma Point, Adjustable Detail Enhancement Frequency, Time/Date Generator, Star Filter, Audio level control, "full time automatic" white balance, Continuous Auto-Black (CAB) and Smooth transitions mode.
- Docks with JVC Digital-S, Mini-DV, S-VHS and other industry standard formats.
- Most accessories compatible with KY-27 series

JVC
DIGITAL KY-D29

(User-supplied microphone)



KY-D29WE

- Switchable 16:9/4:3 model also available, see distributor for features and specifications.

Optical system	2/3-inch F1,4 RGB prism system
Image pickup device	2/3-inch 3 Interline-Transfer CCDs, 3-chip
Picture elements	745 H x 581 V, 430,000 pixels (effective)
Synchronizing system	Internal/External
Lens mount	2/3-inch bayonet
Sensitivity	F11, 2000 lux, 0 dB gain
Minimum illumination	0.35 lux F1, 4, Super LoLux mode
S/N ratio	63 dB (Detail OFF, Gamma 1, Bandwidth 5.0 MHz, Matrix OFF, DNR ON)
Vertical resolution	V-Plus: 500 TV Lines V-Max: 540 TV Lines (sensitivity x 1/2, 25fps) Normal: 450 TV Lines
Horizontal resolution	850 TV Lines (Typical)
Registration	0.05% (Without Lens, Distortion, in all areas)
Detail correction	Two-way in both H and V directions
Colour bars	EBU FULL FIELD
Gain boost	-3, 0, 6, 9, 12, 18 dB, Selectable by menu. Variable Gain in ALC
Shutter speed	1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000 variable shutter in ALC
Variable scan	1/50 to approx. 1/2000 sec.

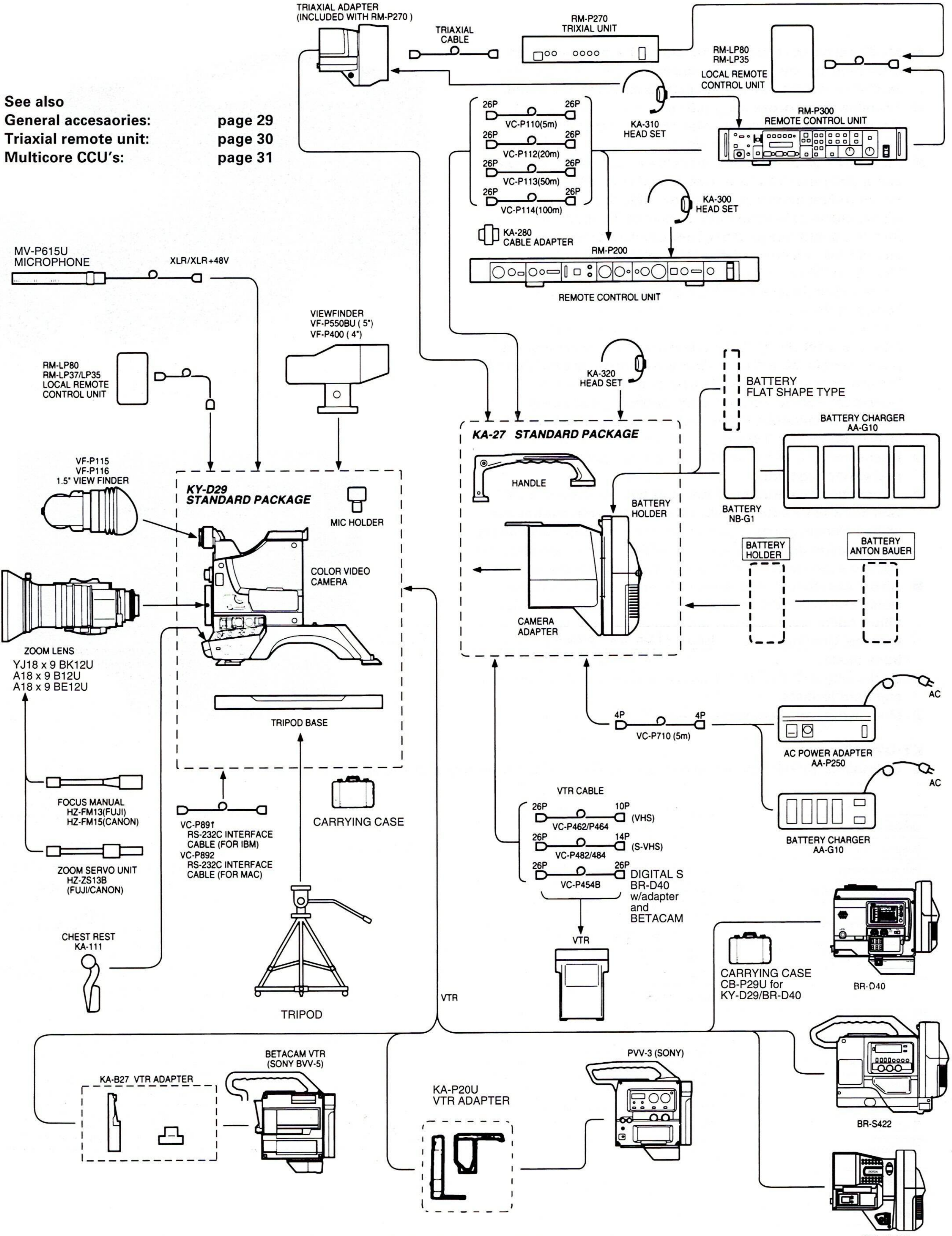
Output signal (KA-27E)	
Video signal output	
1.Composite video signal	1.0 V (p-p), 75 ohms (BNC, 26-pin)
2.Separate Y/C signal	Y: 1.0 V (p-p), 75 ohms (7-pin, 26-pin) C: 0.3 V (p-p), 75 ohms
3.Component video signal	Y: 1.0 V (p-p), 75 ohms (26-pin) R-Y/B-Y: 0.525V(p-p), 75 ohms (26-pin)
4.RGB signal	RBG: 0.7 V(p-p), 75 ohms (26-pin) (2,3 or 4 is selectively output from the same 26-pin connector)
Audio signal	-60/-20 dBm selectable 600 ohms, balanced
Input signal	
Return video signal	VBS: 1.0 V (p-p), 75 ohms, (26-pin, 50-pin docked)
Genlock signal	VBS: 1.0 V (p-p), 75 ohms (BNC, 26-pin) BB: 0.45 V (p-p), 75 ohms (BNC, 26-pin)
Audio signal	XLR: -60 dBm, balanced, 48 V phantom power supply
Power requirement	12 V DC (Normal), 10.5 V to 17 V DC
Power consumption	Approx. 16 W
Ambient temperature	-5°C to +45°C
Weight	Approx. 2.3 kg (head only)

System Configuration

KY-D29E

- **See also**

General accesaories:	**page 29**
Triaxial remote unit:	**page 30**
Multicore CCU's:	**page 31**

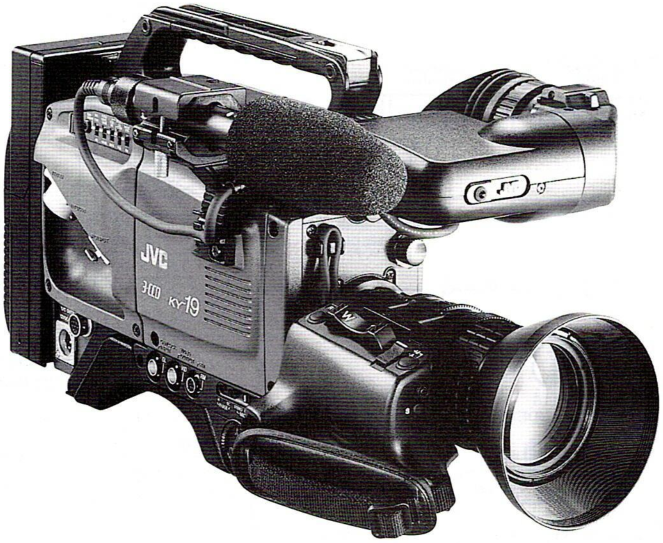

TRIAXIAL ADAPTER (INCLUDED WITH RM-P270)
TRIAXIAL CABLE
RM-P270 TRIXIAL UNIT
RM-LP80
RM-LP35
LOCAL REMOTE CONTROL UNIT
26P
VC-P110(5m)
VC-P112(20m)
VC-P113(50m)
VC-P114(100m)
KA-310 HEAD SET
RM-P300 REMOTE CONTROL UNIT
KA-300 HEAD SET
KA-280 CABLE ADAPTER
RM-P200
REMOTE CONTROL UNIT
MV-P615U MICROPHONE
XLR/XLR+48V
VIEWFINDER
VF-P550BU (5")
VF-P400 (4")
RM-LP80
RM-LP37/LP35
LOCAL REMOTE CONTROL UNIT
KA-320 HEAD SET
BATTERY FLAT SHAPE TYPE
BATTERY CHARGER AA-G10
VF-P115
VF-P116
1.5" VIEW FINDER
KY-D29 STANDARD PACKAGE
MIC HOLDER
KA-27 STANDARD PACKAGE
HANDLE
BATTERY HOLDER
BATTERY NB-G1
BATTERY HOLDER
BATTERY ANTON BAUER
COLOR VIDEO CAMERA
CAMERA ADAPTER
ZOOM LENS
YJ18 x 9 BK12U
A18 x 9 B12U
A18 x 9 BE12U
TRIPOD BASE
4P
VC-P710 (5m)
AC
AC POWER ADAPTER AA-P250
AC
BATTERY CHARGER AA-G10
FOCUS MANUAL
HZ-FM13(FUJI)
HZ-FM15(CANON)
VC-P891
RS-232C INTERFACE CABLE (FOR IBM)
VC-P892
RS-232C INTERFACE CABLE (FOR MAC)
CARRYING CASE
VTR CABLE
26P
10P
VC-P462/P464
(VHS)
14P
VC-P482/484
(S-VHS)
VC-P454B
DIGITAL S BR-D40 w/adapter and BETACAM
ZOOM SERVO UNIT
HZ-ZS13B
(FUJI/CANON)
CHEST REST
KA-111
TRIPOD
VTR
VTR
CARRYING CASE CB-P29U for KY-D29/BR-D40
BR-D40
BETACAM VTR (SONY BVV-5)
KA-B27 VTR ADAPTER
KA-P20U VTR ADAPTER
PVV-3 (SONY)
BR-S422
BR-DV10

Professional Camera

KY-19E

- **440,000 pixel 1/2-inch CCDs deliver 750 lines of horizontal resolution for natural, sharp pictures.**
- **Interline Transfer CCDs with Micro Lens Technology provide:**
  - **High sensitivity of F8 at 2000 Lux**
  - **Negligible vertical smear when shooting highlights**
- **High S/N ratio of 60 dB for quiet pictures.**
- **New CCD signal process technology in LOLUX mode requires only 2 Lux for shooting in almost total darkness.**
- **Full Auto Shooting with manual override provides Auto Iris with Multizone Iris Weighting, Enhanced Variable Gain (ALC: Automatic Level Control), Variable Shutter (EEI: Extended Electronic Iris), and Full Time Auto White.**
- **Innovative Multizone Iris Weighting system and Automatic Peak/Average Balance Detection (APB) enhance accuracy of auto iris**
- **Universal dockability. Dockable directly with Digital S, MiniDV, and Professional S-VHS. Adapters allow docking with MII, Hi8, Professional Betacam® and Broadcast Betacam®.**
- **Viewfinder Status System incorporated in large 1.5-inch viewfinder displays audio levels, accumulated and remaining recording time, VTR operation, battery voltage, and camera set-up**
- **The KY-19E features a newly-developed colour matrix circuit to assure accurate colour reproduction.**
- **Variable Scan ensures flicker-free shooting of CRTs**

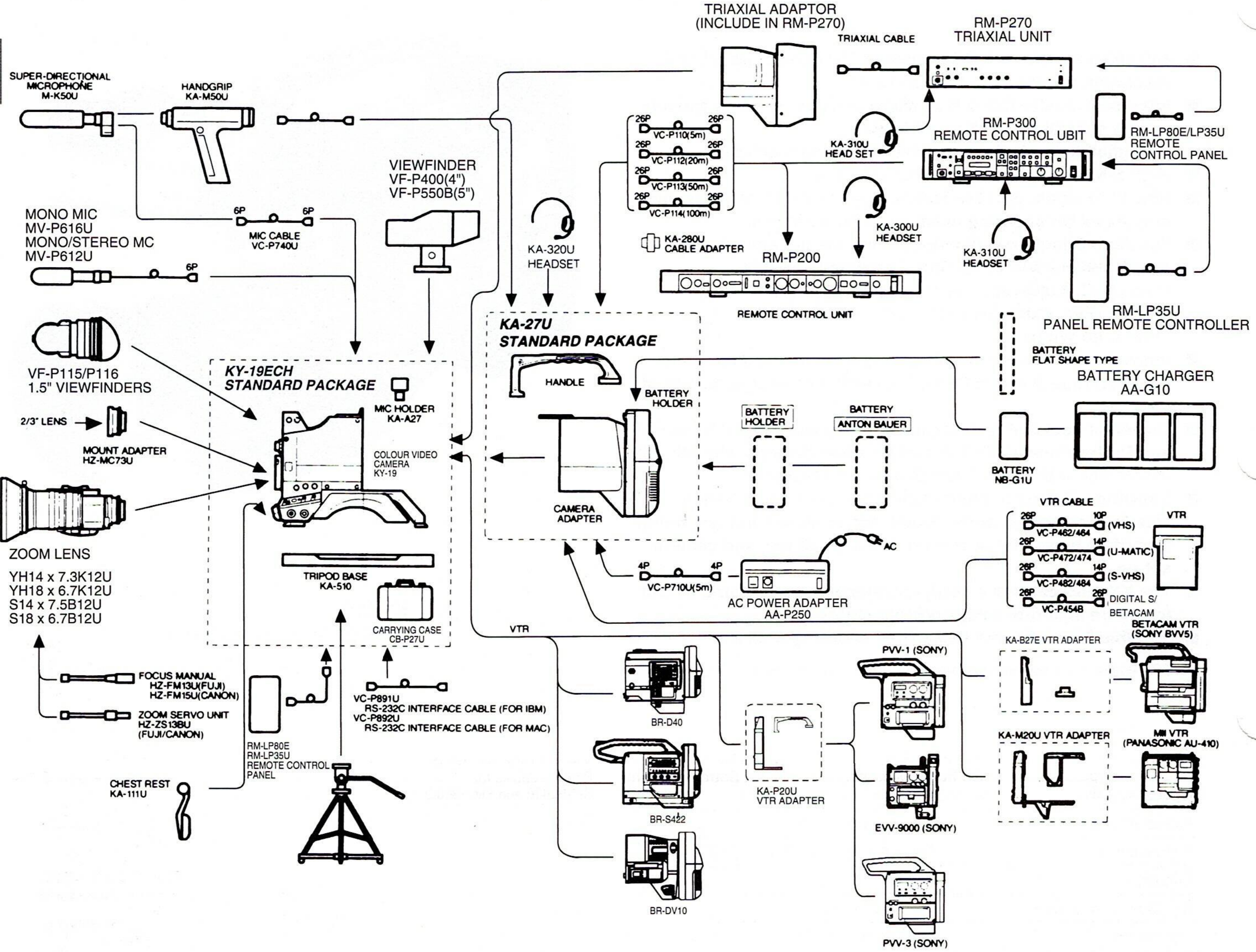
* BETACAM ® is a registered trademark of Sony Corporation.



KY-19E
(With optional accessories)

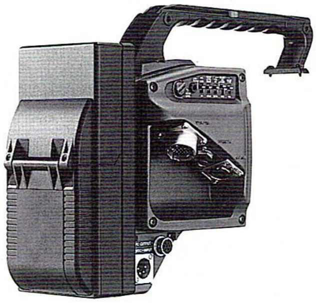
Optical system	1/2" F1.4 RGB prism system
Pickup device	1/2" Interline-transfer CCD, 3-chip
Picture elements	440,000 (effective) (752H × 582V)
Encoder	PAL (U, V encoder)
Synchronizing system	Internal/External
Optical filter	3200°K, 5600°K, 5600°K + 1/16 ND
Lens mount	1/2" bayonet
Sensitivity	F8 at 2000 lux, 0dB gain
Minimum illumination	7.5 lux (+18 dB, F1.4) 2 lux (LOLUX mode, F1.4 equivalent to +30 dB gain)
S/N	60 dB typical (Detail correction OFF, Gamma 1, Bandwidth 5 MHz, Matrix OFF)
Horizontal resolution	750 TV lines, 540 TV lines (R/G/B)
Registration	0.05% (without lens distortion) in all areas
Detail correction	Horizontal: Dual-edged Vertical: 2H
Colour bars	Full field (EBU)
Gain boost	0, 6, 9, 12, 18, Variable gain in ALC
LOLUX	30dB gain equivalent
Shutter speeds	1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, Variable shutter in ALC
Variable scan	1/50.1 ~ 1/2067.8, 305 steps
Output signals (KA-27E)	Video signals: 1. Composite video signal: 1.0 Vp-p, 75 ohms (BNC, 26P) 2. Separate Y/C signal: Y: 1.0 Vp-p C: 0.3 Vp-p, 75 ohms (7P, 26P) (Burst) 3. Component video signal: Y: 1.0 Vp-p, 75 ohms R-Y/B-Y: 0.525 Vp-p, or 0.7Vp-p, 75 ohms (26P) 4. R/G/B signal: R/G/B: 0.7 Vp-p, 75 ohms (26P) (2, 3 or 4 is selectively output from the same 26-pin connector) Audio signal: –60/–20dBm selectable (Stereo/Monaural applicable), 600 ohms balanced
Input signals	Return video signal: VBS 1.0 Vp-p, 75 ohms (26P, 50-pin docked) Genlock signal: VBS: 1.0 Vp-p, 75 ohms (BNC, 26P) BB: 0.45 Vp-p, 75 ohms (BNC, 26P) Audio signal: Mic level JVC 6P, XLR: JVC 6P: –52 dBm, unbalanced 9 V power, Stereo/Mono XLR: –60 dBm, balanced
Power requirement	+12 V DC (Normal) 10.5 V to 18 V DC (Permissible battery range)
Power consumption	12.6 W with camera adapter and viewfinder 11.9 W with viewfinder only 9.8 W without adapter or viewfinder
Ambient temperature	–5°C to +45°C (23°F to 113°F)
Weight	2.0 kg (4.4 lbs) (camera head only)

KY-19E System Configuration


TRIAXIAL ADAPTOR
(INCLUDE IN RM-P270)
TRIAXIAL CABLE
RM-P270
TRIAXIAL UNIT
SUPER-DIRECTIONAL MICROPHONE
M-K50U
HANDGRIP
KA-M50U
26P
VC-P110(5m)
VC-P112(20m)
VC-P113(50m)
VC-P114(100m)
KA-310U
HEAD SET
RM-P300
REMOTE CONTROL UBIT
RM-LP80E/LP35U
REMOTE
CONTROL PANEL
VIEWFINDER
VF-P400(4")
VF-P550B(5")
MONO MIC
MV-P616U
MONO/STEREO MC
MV-P612U
6P
MIC CABLE
VC-P740U
KA-320U
HEADSET
KA-280U
CABLE ADAPTER
RM-P200
KA-300U
HEADSET
KA-310U
HEADSET
REMOTE CONTROL UNIT
RM-LP35U
PANEL REMOTE CONTROLLER
KA-27U
STANDARD PACKAGE
HANDLE
BATTERY HOLDER
BATTERY
FLAT SHAPE TYPE
BATTERY CHARGER
AA-G10
VF-P115/P116
1.5" VIEWFINDERS
KY-19ECH
STANDARD PACKAGE
MIC HOLDER
KA-A27
2/3" LENS
MOUNT ADAPTER
HZ-MC73U
COLOUR VIDEO
CAMERA
KY-19
BATTERY
HOLDER
BATTERY
ANTON BAUER
BATTERY
NB-G1U
CAMERA
ADAPTER
VTR CABLE
26P
10P
VC-P462/464
(VHS)
14P
VC-P472/474
(U-MATIC)
VC-P482/484
(S-VHS)
VC-P454B
DIGITAL S/
BETACAM
VTR
ZOOM LENS
YH14 x 7.3K12U
YH18 x 6.7K12U
S14 x 7.5B12U
S18 x 6.7B12U
TRIPOD BASE
KA-510
4P
VC-P710U(5m)
AC
AC POWER ADAPTER
AA-P250
CARRYING CASE
CB-P27U
VTR
BETACAM VTR
(SONY BVV5)
PVV-1 (SONY)
KA-B27E VTR ADAPTER
FOCUS MANUAL
HZ-FM13U(FUJI)
HZ-FM15U(CANON)
ZOOM SERVO UNIT
HZ-ZS13BU
(FUJI/CANON)
VC-P891U
RS-232C INTERFACE CABLE (FOR IBM)
VC-P892U
RS-232C INTERFACE CABLE (FOR MAC)
BR-D40
KA-M20U VTR ADAPTER
MII VTR
(PANASONIC AU-410)
RM-LP80E
RM-LP35U
REMOTE CONTROL
PANEL
CHEST REST
KA-111U
BR-S422
KA-P20U
VTR ADAPTER
EVV-9000 (SONY)
BR-DV10
PVV-3 (SONY)

Optional Accessories (KY-D29E/KY-27CE/KY-19E)

KA-27E
Camera Adapter



S14 × 7.5B12U
14:1 Power Zoom Lens
(KY-19E only)

(Fujinon)

S18 × 6.7B12U
18:1 Power Zoom Lens
(KY-19E only)

(Fujinon)

YH14 × 7.3K12U
14:1 Power Zoom Lens
(KY-19E only)

(Canon)

YH18 × 6.7K12U
18:1 Power Zoom Lens
(KY-19E only)

(Canon)

HZ-ZS13BU
Zoom Servo Control
Unit

A18 × 9B12U
18:1 Power Zoom Lens
A16 x 9B12U
16:1 Power Zoom Lens

(Fujinon)

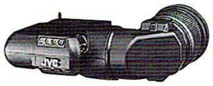
A18 × 9BE12U
18:1 Power Zoom Lens with
2x extender
A16 x 9BE12U
16:1 Power Zoom Lens with
2x extender

(Fujinon)

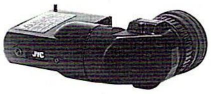
YJ18 × 9BK12U
18:1 Power Zoom Lens

(Canon)

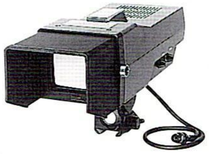
VF-P116E
Heavy Duty
1.5″ Viewfinder



VF-P115E
1.5″ Viewfinder



VF-P400E
4″ Viewfinder

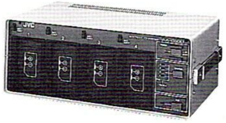


VF-P550BE
5″ Viewfinder

HZ-FM13U
Focus Manual Control
for Fujinon Lens

HZ-FM15U
Focus Manual Control
for Canon Lens

AA-G10E
Battery Charger/
AC Power Adapter



AA-P250E
AC Power Adapter/
Charger

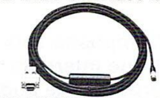
NB-G1U
Ni-Cd Battery (2.2Ah)

JVC BATTERY PACK
NB-G1U
12V
2.2Ah

VC-P110U SERIES
Remote Cables for RM-P200E and RM-P300E: VC-P110U (5m), VC-P112U (20m), VC-P113U (50m), VC-P114U (100m)

KA-280U
Remote Cable
Coupler

VC-P891U
RS-232C Interface Cable



VC-P892U RS-232C
Interface Cable for
Macintosh

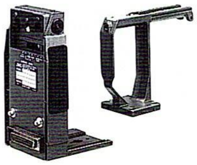
RM-LP35U
Remote Control Panel
for RM-P300E,
RM-P270E
and
Camera
Head

RM-LP80E
Remote Control Panel
for RM-P270E and
Camera Head

MV-P612U
Stereo/Super
Directional Microphone
(KY-19E, 27CE/35E)

MV-P615U for XLR
MV-P616U for 6-pin
(KY-D29E uses XLR,
KY-19E uses 6-pin)

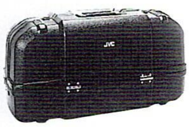
KA-P20U
PVV-1/EVV-9000
Adapter (KY-19E only)



KA-B27E
Betacam Adapter
(for BVV-5)

KA-M20U
MII Adapter
(KY-19E,27CE only)

CB-P27U
Carrying Case



CB-P29U
Carrying Case for KY-D29E Stand-Alone or KY-29E with BR-D40E

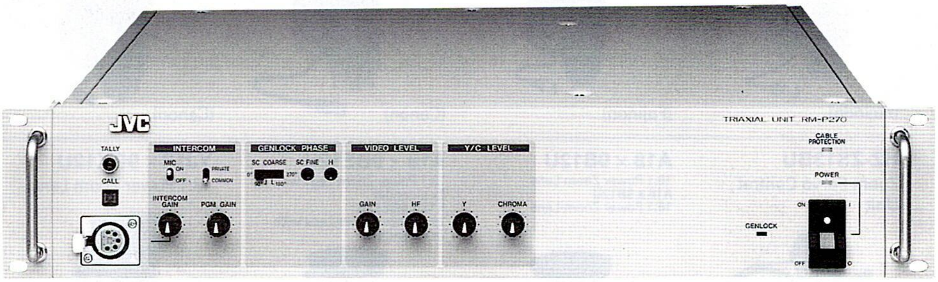
KA-300U/KA-320U
Intercom Headset for
RM-P200E/KA-27E

KA-310U
Intercom Headset for
RM-P300E

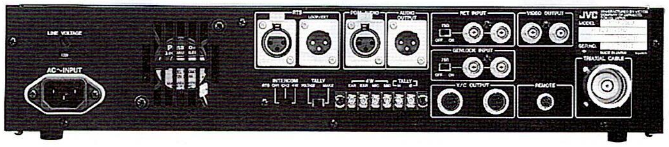
KA-111U
Chest Rest

Triaxial Remote Camera Control System

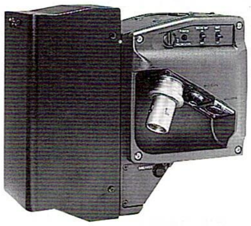
RM-P270E


JVC
TRIAXIAL UNIT RM-P270
TALLY
CALL
INTERCOM
MIC
INTERCOM GAIN
PGM GAIN
GENLOCK PHASE
SC COARSE
SC FINE
H
VIDEO LEVEL
GAIN
HF
Y/C LEVEL
Y
CHROMA
CABLE PROTECTION
POWER
ON
OFF
GENLOCK

RM-270E
(KY-D29E/27CE/19E)



RM-P270E REAR



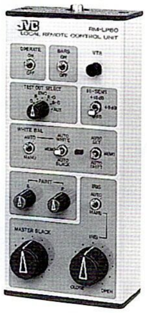
Triaxial Adapter (Included with RM-P270E)

- **Composite and Y/C outputs**
- **4-line intercom system (selectable)**
- **Programme audio output monitoring**
- **Extendable to 1,500m (5,000 ft.)**
- **Serial data link camera control**
- **Automatic camera phase control for genlock circuit**
- **19" rack mountable (2U)**
- **Optional RM-LP35U and RM-LP80E remote operator control panels**

Output signals	
Composite video signal	Y: 1Vp-p 75 ohms × 2
Y/C signal	Y: 1Vp-p (including SYNC) 75 ohms C: 0.3Vp-p (burst level) 75 ohms×2
Intercom	4-wire system: 0 dB, 600 ohms balanced RTS system : –10 dB, 200 ohms, unbalanced
Audio signal	–20 dBm, 600 ohms
Input signals	
External sync signal	Composite video signal: 1Vp-p, 75 ohms (bridge connectable) or black burst: 0.45 Vp-p
RET signal	Composite video signal or VS: 1Vp-p, 75 ohms × 2 (bridge connectable)
Intercom	4-wire system: 0 dB, 600 ohms RTS system ; –10 dB, 200 ohms, unbalanced
Programme audio	–4 dB, 600 ohms, unbalanced
Tally	Contact supply or power supply (5–24V DC or 6V AC)
Others	
Input voltage	220 V/240 V AC, 50/60 Hz
Power consumption	68 W (including camera with VF-P550)
Weight	Base station: 10.2 kg (22.5 lbs.) Camera adapter: 2.5 kg (5.5lbs.)
Ambient temperature	–0°C to 40°C (32°F to 113°F)

Optional Remote Control Panels

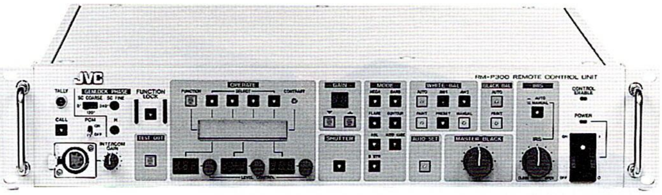
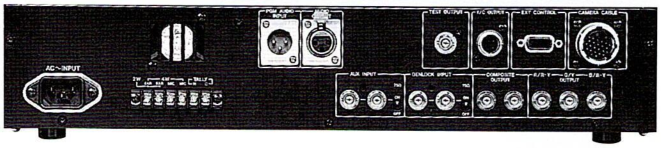
RM-LP35U


JVC
RM-LP80
LOCAL REMOTE CONTROL UNIT
MASTER BLACK

RM-LP80E

Multicore Remote Camera Control Units

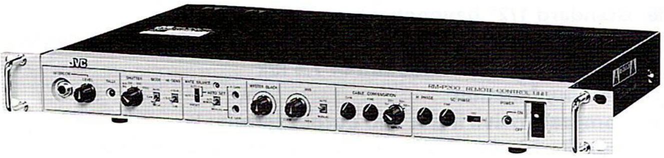
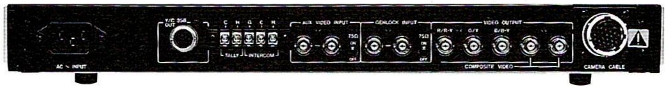
RM-P300E

- Extendable up to between 250 and 300 m via VC-P110 series multicore cable
- Can output composite, Y/C 443 and component signals (Y, R-Y, B-Y or R, G, B selectable)
- One audio output and one programme input are available
- Can be connected to the Remote Control Panel RM-LP35U for remote operation
- LCD read out at the base station for simple operation

Input signals	
External sync signal	VBS: 1.0 Vp-p or BB: 0.45 Vp-p, 75 ohms, bridge-connectable
AUX VIDEO signal	VBS: 1.0 Vp-p, 75 ohms, VS: 1.0 Vp-p, 75 ohms, bridge-connectable
Intercom signal	2 W (–10 dB, 600 ohms, balanced)/ 4 W (0 dB, 600 ohms, balanced)
Aux audio signal	–4 dB, 600 ohms, unbalanced
Tally signal	Contact supply or power (5 – 24 V DC or 6 V AC) supply
Output signals	
Test signal 1	VBS × 2, Y/C × 1, RGB./Y,R-Y,B-Y (Switchable) × 1
Video signal	VBS × 1
Audio signal	2 ch.
Power requirement	220/240 V AC, 50/60 Hz
Power consumption	115 W (incl. camera furnished with VF-P550)/ 27 W (RM-P300E only)
Ambient temperature range	–10°C – +45°C
Dimensions (W × H × D)	482 × 93 × 366.5 mm (19" × 3-11/16" × 14-7/16")
Weight	6.8 kg (15.0 lbs.)

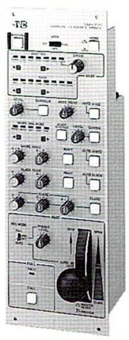
RM-P200E

- Controls cameras KY-D29E, KY-27CE, KY-19E over extended distance of over 100 meters (325 ft.)
- Ideal for normal applications such as studio production, remote truck teleconferencing or computer graphics
- Built-in genlock function
- Serial data communications for more reliable and accurate communications between the camera and RCU
- Multi-format outlets supply; R/G/B component for computer graphics and keying plus Y/R-Y/B-Y component for MII or Y/C 443 for S-VHS products

Input signals	
Genlock signal:	Composite video signal 1 Vp-p, 75 ohms (Loop-through output) Black burst signal 0.45 Vp-p, 75 ohms (Loop-through output)
AUX signal:	Composite video signal 1 Vp-p, 75 ohms (Loop-through output)
Intercom signal:	Two-wire system, –10 dB, 600 ohms balanced
Tally signal:	Make-contact or power (5 – 24 V DC or 6 V AC) supply
Output signal	
Composite video signal:	1 Vp-p, 75 ohms x 2
R/G/B signals:	0.7 Vp-p, 75 ohms x 1 each (without sync)
Y/R-Y/B-Y signals:	Y: 1 Vp-p, R-Y: 0.486 Vp-p, B-Y: 0.486 Vp-p, 75 ohms each
Y/C 443 signals:	Y: 1 Vp-p, 75 ohms, C: 0.3 Vp-p, 75 ohms (burst level)
Intercom signal:	Two-wire system, –10 dB, 600 ohms balanced

Optional Accessories



RM-LP35U
(RM-P300E only)

VC-P110 Series 26p Multicore Cables
(5 m, 20 m, 50 m, 100 m)

1/2" Bayonet 3CCD Colour Video Camera

KY-F32E

- Standard 1/2" bayonet mount
- 750 horizontal lines with a high sensitivity of F 8 at 2,000 lux and minimum illumination of 7.5 lux
- Memory function
- Comprehensive input and output terminals
- High-Resolution Frame Integration Mode boosts vertical resolution to 480 lines
- Negative video function
- Full-time automatic operation
- Menu setup control on camera head and with RS-232C

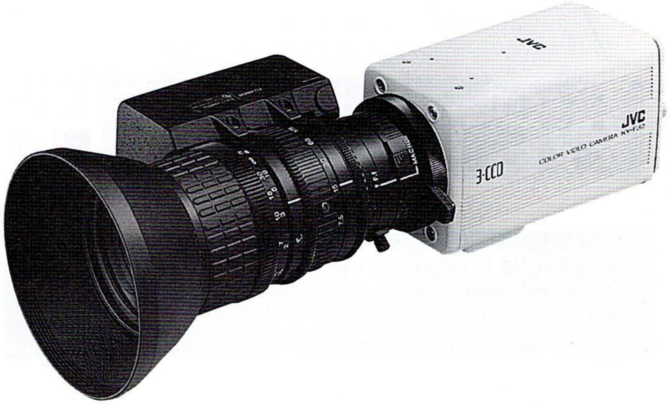
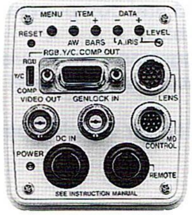


Image pickup device:	1/2" interline CCD X 3 (R,G,B)
Colour separation optical system:	1/2" F1.4 RGB 3-colour separation prism
Number of pixels (effective):	440,000
Colour system:	Wideband R-Y, B-Y encoder
Synchronising system:	Internal/External
Colour bar generator:	Built-in, EBU type
Lens mount:	1/2" bayonet
Sensitivity:	F8/2,000 lux
Minimum required illumination:	7.5 lux (F1.4, 18dB, 100% IRE video level)
Electric gain:	0 dB, 6 dB, 9 dB, 12 dB, 18 dB, ALC
S/N ratio (standard):	60 dB (Detail correction OFF, Gamma 1)
Detail correction:	Dual-edged
Horizontal resolution:	750 TV lines (Y signal), 580 TV lines (RGB signal)
Registration:	0.05% (excluding lens characteristics)
Electronic shutter:	1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000 sec., EEI
Variable scan:	1/60.3 to 1/2074.6
Negative video function:	Provided
Frame integration mode:	Provided
External sync signal input:	Composite video signal 1 V(p-p), 75 ohm or black burst signal 0.45 V(p-p), 75 ohm
Output signals	
Composite video signal:	1 V(p-p), 75 ohms BNC connector one channel, D-SUB 9-pin connector one channel
Y/C signal	Y: 1 V(p-p), 75 ohms (including sync) C: 0.3 V(p-p), 75 ohms (burst) D-SUB 9-pin connector one channel
RGB signal:	0.7 V(p-p), 75 ohms (without sync) each D-SUB 9-pin connector one channel
Component signal:	Y: 1 V(p-p), 75 ohms R-Y/B-Y: 0.525 V (p-p), 75 ohms D-SUB 9-pin connector one channel
Composite sync signal:	2 V(p-p), 75 ohms D-SUB 9-pin connector one channel
Remote input:	Applicable to the RM-LP55U/LP57U convertible to RS-232C with optional VC-P893U/894U
Power supply:	12 V DC (10.5 to 15 V)
Power consumption:	0.7 A (camera only), 1.1 A (maximum load)
Ambient temperature range:	-5˚C to +40˚C (23˚F to 104˚F)
Weight:	850 g (1.9 lbs)
Accessories:	DC cable (VC 462-2:2 m) X 1



For 9-pin connector configuration and 9-pin signal cables See page 37

Optional Accessories

RM-LP55U
Camera Remote Control Unit

RM-LP57U
Camera Remote Control Unit
(Rack Mount Type)

RM-713MDU
Lens Remote Control Unit

VC-P893U
RS-232C Interface Cable

VC-P894U
RS-232C Interface Cable for Macintosh

S14x7.5BMDU
14:1 Power Zoom Lens

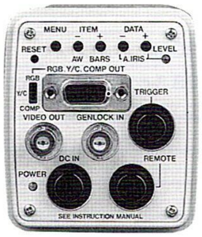
AA-P700E
AC Power Adaptor

2/3" C Mount 3CCD Colour Video Camera

KY-F50E

JVC
LOCK FOCUS
JVC
COLOR VIDEO CAMERA KY-F50
3-CCD

- **High-performance 3-CCD camera**
  Thanks to newly developed 1/3-inch 440,000 pixel CCDs with on-chip lens, the KY-F50 delivers a superb, high-quality picture with an S/N ratio of 58 dB and sensitivity as high as 2000 lux at F10. High-precision bonding technology and new circuitry incorporated in the CCD assure horizontal resolution of 700 lines.
- **Compact, lightweight camera with C mount**
  Weighing a mere 870 grams, the KY-F50's remarkably compact, lightweight design has been made possible by the incorporation of a newly developed IC, 2/3-inch optical system.
- **Comprehensive functions**
  - Automatic functions including ALC, EEI and FAW.
  - Remote control signal input connector for the optional remote control unit (RM-LP55)
- **Comprehensive signal outputs**
  - Composite video signal (D-SUB 9-pin, BNC)
  - Y/C443 signal (D-SUB 9-pin)
  - R/G/B signal (D-SUB 9-pin)
  - Component signal (D-SUB 9-pin)
  - Composite sync signal (D-SUB 9-pin)
- **Negative/positive function**
  For special applications such as film shooting
- **Dynamic shading compensation function**
  Compensates for uneven colour caused by combining the lenses.
- **High-resolution function enhances vertical resolution**
- **Back focus compatible with 16 mm film type lenses.**
- **IEC 601-1 Medical Certificate**



For 9-pin connector configuration and 9-pin signal cables See page 37

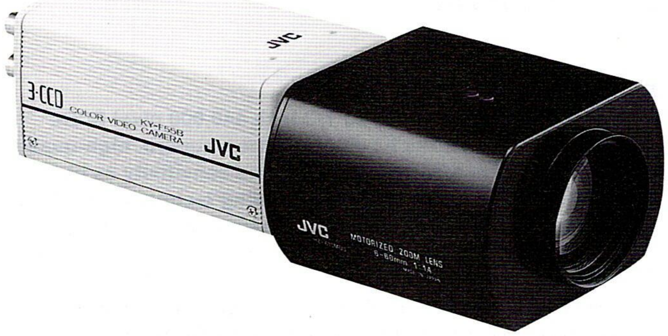
Pickup device	1/3 inch interline CCD × 3
Effective number of pixels	440,000 pixels
Colour separation optical system	F1.4, RGB 3-colour separation prism
Lens mount	C mount (2/3 inch optical system)
Colour system	PAL (wideband R-Y, B-Y encoder)
Sync system	Internal/external
Sensitivity	F10, 2000 lux
Actual-use minimum illumination	20 lux (F3.2, + 18 dB) 100% video level
S/N ratio	58 dB (typical)
Horizontal resolution	700 TV lines (Y signal) 580 TV lines (RGB signal)
Registration	0.05% at centre (excluding lens characteristics)
Contour correction	Horizontal; dual-edged Vertical; dual-edged
Negative function	Provided
High-resolution mode	Provided
Gain	+6 dB, +9 dB, +12 dB, +18 dB, ALC
Electronic shutter speed	Normal (1/150 sec) 1/120, 1/250, 1/500, 1/1000, 1/2000, EEI
External sync signal input	Composite video signal 1 V(p-p), 75 ohms or black burst signal 0.45 V(p-p), 75 ohms
Colour bars	Built-in EBU colour bars signal

Output signals	
Composite video signal:	1 V(p-p) BNC connector one channel, D-SUB 9-pin connector one channel
Y/C signal	Y: 1 V(p-p), 75 ohms (including sync) C: 0.3 V(p-p), 75 ohms (burst) D-SUB 9-pin connector one channel
RGB signal	0.7 V(p-p), 75 ohms (without sync) each D-SUB 9-pin connector one channel
Component signal	Y: 1 V(p-p), 75 ohms R-Y/B-Y: 0.525 V(p-p), 75 ohms D-SUB 9-pin connector one channel
Composite sync signal	2 V(p-p), 75 ohms D-SUB 9-pin connector one channel
Trigger connector	TRG: 5 V(p-p) (Negative polarity) SI: 5 V(p-p) (Negative polarity) WEN: 5 V(p-p) (Negative polarity)
Remote connector	Applicable to the RM-LP55
Power supply	12 V DC (10.5 to 15 V)
Power consumption	8.5 W (camera only), 12 W (maximum load)
Ambient temperature range	–5°C to 40°C (23°F to 104°F)
Accessories	
Power supply	AA-P700E
Remote control unit	RM-LP55U/RM-LP57U
RS232 Interface cable	VC-P893U (IBM PC/AT) VC-P894U (Macintosh)

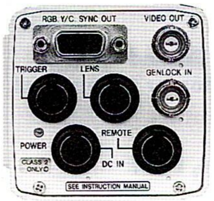
1/3" C Mount 3CCD Colour Video Camera

KY-F55BE

- C-Mount compatibility
- Random Trigger for strobe synchronisation
- Slow Shutter for low light image capture
- High-resolution Frame Integration Mode
- Variable speed electronic shutter
- Compact and lightweight
- EBU type colour bar generator
- Full-time Auto/Manual White Balance and Two Auto White memories
- Enhanced Automatic Level Control (ALC) with Extended Electronic Iris (EEI)
- Wide range of video outputs
- Auto Internal Sync/External Sync switching
- Flexible camera mountings
- RS-232C interface capability
- White shading correction



Shown with optional lens (HZ-610MDU)



For 9-pin connector configuration and 9-pin signal cables See page 37

Image pickup device: 1/3-inch interline CCD x 3 (RGB)

Colour separation optical system: 1/3-inch F1.4 RGB 3-colour separation prism

Number of pixels (effective): 440,000 pixels

Colour system: Wideband R-Y, B-Y encoder

Synchronizing system: Internal/External

Genlocking input: Composite video signal, VBS, BB, 1 V(p-p), 75-ohms (or black burst signal) BNC connector

Colour bar generator : Built in, EBU type

Lens mount: C-mount

Sensitivity: F5.6, 2000 lx

Sensitivity selection: (Through remote control); 0 dB/6 dB/9 dB/12 dB/ 18 dB/ALC + EEI (Through camera); 0 dB/ALC/EEI/ALC + EEI

S/N ratio: 58 dB (typical)

Registration: 0.05% (excluding lens characteristics)

Horizontal resolution: 750 TV lines (Y channel) 580 TV lines (RGB)

Contour correction: Adjustable through remote control unit RM-LP55U
Horizontal: dual-edged
Vertical: single-edged

Video signal output:
Composite video signal: VBS 1 V(p-p), 75 ohms
R/G/B signals: 0.7 V(p-p), 75 ohms
Composite sync signal: 2 V(p-p), 75 ohms

Y/C 443 output: Y signal: 1 V(p-p), 75 ohms
C signal: 0.3 V(p-p), (burst level) 75 ohms

Electronic shutter speed: 1/100, 1/250, 1/500, 1/1000, 1/2000 sec.

Variable scan: 1/60.3 to 1/2074.6

Trigger connector: 5-pin, 5 V(p-p)

Lens pin connector: 8-pin, applicable to the HZ-610MDU, HZ-G6350U, T14 x 5.5 MDU

Remote input: compatible with the RM-LP55U convertible to RS-232C with optional VC-P893U/894U

Power source: 12 V DC (10.5 to 15 V), 7.5 W (Camera head only)

Operating temperature range: –5°C to + 40°C (23°F to 104°F)

Weight: 490 g/1.1 lbs. (without lens)

Optional Accessories

HZ-M161U
Nikon Microscope Adaptor
For use with ×2 series microscopes

HZ-M162U
Olympus Microscope Adaptor
For use with BH2 series microscopes

HZ-M163U
Zeiss Microscope Adaptor
For use with AX10 series microscopes

VC-P893U
RS-232C Interface Cable

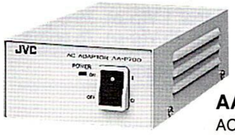
VC-P894U
RS-232C Interface Cable for Macintosh

HZ-610MDU
10:1 Motorized Zoom Lens
- C-mount for 1/3" 3-CCD camera
- Focal length: 6 mm to 60 mm

T14 x 5.5MDU
14:1 Motorized Zoom Lens

HZ-G6350U
Variable Focal Lens
- C-mount for 1/3" 3-CCD camera
- Focal length: 3.5 mm to 8.0 mm

RM-LP55U
Camera Remote Control Unit



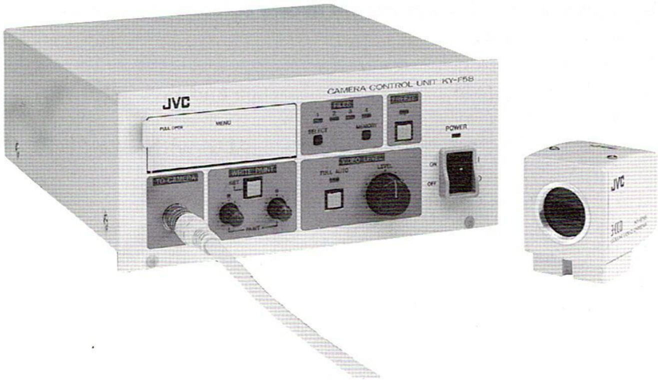
AA-P700E
AC Power Adaptor

RM-LP57U
Camera Remote Control Unit (rack mount type)

1/3" 3-CCD Separate Camera Head System

KY-F58E

- **3-CCD RGB prism block, each CCD with 440,000 effective pixels, provides high resolution images**
- **High sensitivity means that images can be captured over a wide range of lighting conditions**
- **Complementing the Auto White-Balance function is intelligent Auto Iris which makes the KY-F58 particularly well-suited to microscopy and other applications which may have irregular reflections**
- **The CCU features an RGB image memory and framestore which allows capture of a high quality still image**
- **The KY-F58 has instant connectivity to a wide range of existing optical equipment thanks to its C-mount being a universal standard for lens to camera coupling. The camera head also includes connection for motorized lens control**
- **An RS-232C port is provided for direct connection to a PC, providing additional remote serial digital control**
- **The KY-F58 comes standard with a 5-meter umbilical cord between head and CCU. This may be extended to 25 meters**
- **Memory for up to 16 operator settings (scene files)**
- **Built-in key functions: Shutter iris/Full-time auto white/Freeze function/Random trigger function/Long time exposure function**



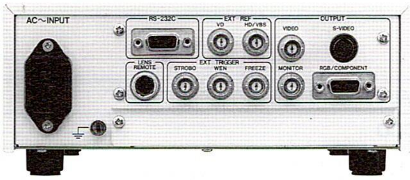


Image pickup device:	1/3" Interline Transfer CCDs
Picture elements:	(H) 768 x (V) 494
Optical system:	1/3" F1.4 RGB prism
Colour system:	Wideband R-Y, B-Y encoder
Synchronization:	Internal/external (VS; HD, VD)
Lens mount:	C-mount (FB: 17.526 mm)
Colour bar:	EBU type
Sensitivity:	F5.6/2000 lux
Horizontal resolution:	700 TV lines
Signal to noise ratio:	58 dB
Minimum illumination:	15 lux
Gain:	0 - 18 dB
Electronic shutter speed:	1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000 variable scan
Iris area:	Selectable
Scene file:	16 types, max.
Strobe connector:	BNC
RS-232C control:	D-sub 9-pin
Video signal output:	Composite, Y/C, RGB, Component
Power source:	230 V AC
Power consumption:	22 W
Dimensions (WxHxD):	Camera head: 45 x 48 x 62 mm CCU 210 x 88 x 221 mm
Weight:	Camera head: 180 g (0.4 lbs.) CCU: 3 kg (6.7 lbs.)
Max. cable length:	25 m (5 m cable provided)

Optional Accessories

HZ-M161
Nikon Microscope Adaptor
For use with ×2 series microscopes

HZ-M162
Olympus Microscope Adaptor
For use with BH2 series microscopes

HZ-M163
Zeiss Microscope Adaptor
For use with AX10 series microscopes

HZ-G6350
Variable Focal Lens
- C-mount for 1/3" 3-CCD camera
- Focal length: 35 mm to 8.0 mm

VC-451-2U
D-sub 9-pin
RGB Cable (2 m)

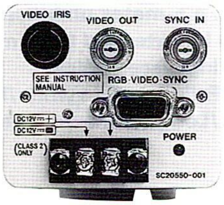
T14X5.5MDU
14:1 Motorized Zoom Lens

1/2" CCD Computer Imaging Colour Video Camera

TK-1270E

- 1/2" CCD delivering 460 lines of horizontal resolution
- Two video outputs (RGB/composite video signals)
- High S/N ratio of 50 dB
- Through-the-lens auto tracking white balance
- Changeable C/CS lens mount allows selection from a wide range of lenses

Shown with optional lens



For optional accessories and 9-pin cable configuration See page 37

Signal system: Based on PAL standard

Image device: 1/2" single CCD

Pickup element: IT (Interline-Transfer) system CCD solid-state image sensor
(with complementary colour filter: Yc-Cy-Mg-Gr)

Effective picture elements: 752 (H) × 582 (V)

Scanning lines: 625 lines, 2:1 interlaced

Scanning frequency: 15.625 kHz (H) × 50Hz (V)

Sync system: Internal, External

Sync input: Composite video signal (VBS)/1.0V(p-p), 75 ohms terminated
(or black burst signal (BB))

Video output: Composite video signal: 1.0V(p-p), 75 ohms, unbalanced
RGB video signal: 0.7 V(p-p), 75 ohms

Sync output: Composite sync signal: 2.0 V(p-p), 75 ohms (negative)

Video S/N: 50 dB (2000lx, AGC "OFF")

Horizontal resolution: 460 TV lines (composite/RGB)

Minimum required illumination: 3 lx (f/1.2, AGC "ON")

Electronic shutter: NORMAL (1/50), 1/120, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 sec., or electronic shutter iris mode

White balance: TTL Auto: 2850°K ~ 7000°K
Manual adjustment: 2850°K ~ 7000°K under 2 peculiar axes systems, G-Mg, R-B
Preset indoor: 3200°K

Lens mount: C mount (with C-mount adapter)
CS mount (without C-mount adapter)

AGC: On and OFF (0 ~ +18 dB)

Power requirement: DC 12 V (±10%)

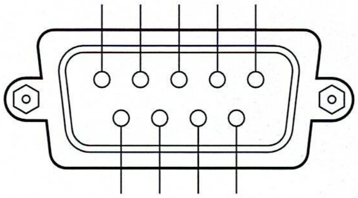
Power consumption (max.): 7.6 W

Operating temperature: 0°C ~ +40°C (32°F ~ 104°F)

Weight: Approx. 600 g (1.3 lbs.)

9-pin signal configuration

(9-pin, female)



(Viewed from front)

Pin No.	Signal (R/G/B signal selected)	Signal (Y/C signal selected)	NOTE
1	No Connect	Ground	for B/C
2	Ground	Ground	for G/Y
3	R (RED) signal output	Composite video signal output	see manual for levels
4	G (GREEN) signal output	Y signal output	see manual for levels
5	B (BLUE) signal output	C signal output	see manual for levels
6	Composite video signal output	Composite video signal output	see manual for levels
7	Composite sync signal output	Composite sync signal output	see manual for levels
8	Ground	Ground	for SYNC
9	External sync input (VBS, BB)	Ground	for R/VBS

Optional Accessories

AA-P700E
AC Adapter

JVC
AC ADAPTOR AA-P700
POWER
ON
OFF

VC-451-2U
Camera Cable

Connecting between:
Cameras and RGB Monitor
Cable length: 6.6 ft (2 m)

VC-452-2U
VC-452-4U
Camera Cable

Connecting between:
Cameras and Graphic Boards
Cable length:
6.6 ft (2 m) for VC-452-2U
13.2 ft (4 m) for VC-452-4U

VC-463-2U
Camera Cable

Connecting between:
Cameras and Graphic Boards
Cable length: 6.6 ft (2 m)

VC-464-4U
Camera Cable

Connecting between
Cameras and Targa +
Cable length: 13.2 ft (4 m)

Professional S and S-VHS

Professional-S

CAMCORDERS

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800 SERIES

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S-VHS

SR-S388E Editing Player/Recorder 48

Professional-S and S-VHS

Optional Accessories 49

Dockable Recorder

BR-S422E

VHS
PAL
625

- **Compact and lightweight design**
- **High-quality S-VHS pictures with resolution of more than 400 lines with maximum 180 min. recording**
- **Quick-response recording start**
- **EBU standard LTC or VITC recording capability via optional time code generator SA-R200E**
- **2-channel Hi-Fi and 2-channel linear audio**
- **Built-in AEQ generator**
- **Built-in loudspeaker**
- **REC CHECK function**
- **Rotary erase head**
- **Backlit LCD display**
- **LCD display indicates time codes, control track data, and tape remaining time**
- **Heavy-duty diecast aluminum body**
- **LED operation indicators**
- **Battery power remaining indicator**
- **Hour meter (switchable from tape counter)**
- **Video/Hi-Fi audio insert editing**
- **Self-diagnostic and maintenance-oriented design**

* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. Dolby and the Double-D symbol DOLBY B NR are trademarks of the Dolby Laboratories Licensing Corporation.

GENERAL

Format: VHS/S-VHS EUROPE- standard

Power requirement: DC 12 V

Power consumption: 13 W

Dimensions: 292 (W) x 242 (H) x 131 (D) mm (with battery holder)

Weight: 3.2 kg

Temperature
Operating: 0°C to 40°C
Storage: -20°C to 60°C

Operating humidity: 30%~80%

Tape width: 12.65 mm

Tape speed: 23.39 mm/sec

Recording and Playback time: 180 min. with SE-180

VIDEO

Recording and Playback system: Rotary four-head helical scanning system

Luminance: FM recording

Colour: Down converted direct recording

Video signal system: PAL-type colour signal/PAL-type Y/C signal

Input (50-pin camera connector)
Y: 1.0 Vp-p, 75 ohms, unbalanced
C: 0.3 Vp-p (burst), 75 ohms, unbalanced

Output
Line: 1.0 Vp-p, 75 ohms, unbalanced
Y/C : Y : 1.0 Vp-p, 75 ohms, unbalanced
C : 0.3 Vp-p (burst), 75 ohms, unbalanced

Signal-to-noise ratio: 45 dB (S-VHS)
45 dB (VHS)

Horizontal resolution: 400 lines (S-VHS)
250 lines (VHS)

AUDIO

Number of tracks: 4 (Hi-Fi: 2/Normal: 2)

Input
Line: -60 dBs, 3 k-ohms, balanced (Hi-Fi/Normal)
Mic: +4 dBs, 10 k-ohms, balanced (Hi-Fi/Normal)

Output
Line: -6 dBs, low impedance, unbalanced (Hi-Fi/Normal)
Earphone: -60 to -12 dBs, 8 ohms
Speaker: 0.5 W, 8 ohms

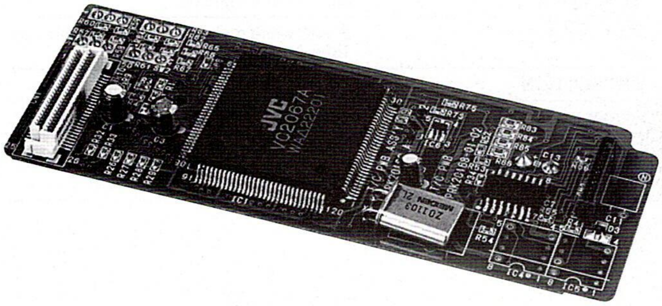
Dynamic range: More than 80 dB (Hi-Fi)

Frequency response: 20 to 20,000 Hz (Hi-Fi) 50 to 12,000 Hz (Normal)

Signal-to-noise ratio: 42 dB (NR-off, Normal)

Wow & flutter: Less than 0.007% WRMS (Hi-Fi)
Less than 0.15% WRMS (Normal)

Provided accessory: Camera handle x 1



SA-R200E
Time Code Generator

3-CCD Colour Video Camcorder

PROFESSIONAL S

GY-X2BE

S-VHS 625 VHS PAL

- **Innovative video technologies including new 1/2" CCDs achieve 750 lines of horizontal resolution,virtually elminate smear, and give an impressive S/N of 60 dB.**
- **The LOLUX mode requires only 1.5 lx when shooting under low-light conditions.**
- **Electronic shutter lets you select speeds form 1/120 to 1/2000 second.**
- **In the Quick Recording Mode, the GY-X2BE activates ALC and EEI for variable gain, variable shutter, and Full-Time Auto White (FAW) , so the operator just has to point and shoot.**
- **The Variable Scan View function ensures flicker-free shooting of a CRT.**
- **New shoulder pad enhances comfort and stability.**
- **The GY-X2BE features a full-sized professional VTR head drum for reliabe,high-quality image reproduction from the built-in S-VHS VTR.**
- **Continuous Auto Black circuit eliminates auto black manual switching.**

* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. Dolby and the Double-D symbol DOLBY B NR are trademarks of the Dolby Laboratories Licensing Corporation.

JVC
GY-X2B
PROFESSIONAL S

CAMERA SECTION	
Image pickup device	1/2-inch interline CCDs
Colour seperation optical system	3-colour seperation prism
Number of effective pixels	440,000 pixels
Colour System	PAL (R-Y,B-Y encoder)
Colour bars	EBU type
Sync system	Internal/external sync (auto)
Lens mount	Bayonet system (FB 35.74 mm, 1/2" CCD cameras)
Optical filter	3200° K, 5600° K, 5600° K + ND
Sensitivity	F8,2000 lx
Gain	0, +9 dB, +18 dB, LOLUX, ALC
Minimum illumination	7.5 lx with F1.4, +18 dB gain
Lolux minimum illumination	1.5 lx with F1.4
S/N ratio	60 dB (typical)
Horizontal resolution	750 lines (luminance signal)
Detail correction	Horizontal: dual-edged; Vertical: dual-edged
Shutter speed	1/120, 1/250, 1/500, 1/1000, 1/2000, variable
Variable scan	50.1 Hz to 2067.8 Hz
White balance	2 auto white memories, 1 preset and Full-Time Auto White
VTR SECTION	
Format	VHS/S-VHS EUROPE standard
Tape speed	23.39 mm/sec
Record/playback time	180 min. (with SE-180 cassette)
Hi-Fi audio dynamic range	More than 80 dB
Horizontal resolution (colour)	400 lines or more (S-VHS mode) 250 lines or more (VHS mode)
Video S/N ratio (colour)	45 dB (VHS S-VHS mode)
Audio S/N ratio	48 dB (NR:ON)
INPUT/OUTPUT SIGNALS	
Video signal output	1.0V (p-p)/75 ohms (BNC)
Lens	12-pin connector
Y/C signal output	Y: 1.0V (p-p)/75 ohms, C: 0.3V (p-p)/75 ohms (Burst), 7-pin connector
DC input	12V DC (11.0 to 15.0V DC)
Battery requirement	10.5V (discharged) up to 17.0V (full charged) battery rating not to exceed 14.4 V nominal
Genlock input	VBS 1.0V (p-p) or BB 0.45V (p-p)/75 ohms (BNC)
Microphone input	-52 dBs (6-pin), unbalanced
Audio input	+4 dBs/10 kohms (select the switch): -60 dBs/3kohms (select the switch), (XLR3), balanced, 2 inputs
Audio output	-6 dBs/1 kohm (RCA), unbalanced
Earphone output	-60 dBs to -12 dBs/8 ohms (ϕ3.5 mini-jack)
GENERAL	
Power consumption	25.2 W (including the lens and 1.5-inch viewfinder)
Weight	Approx.6 kg (13 lbs.) (incl. 1.5-inch viewfinder)
Operating temperature range	0°C to +40°C (+32°F to +104°F)
Storage temperature range	-20°C to +60°C (-4°F to +140°F)

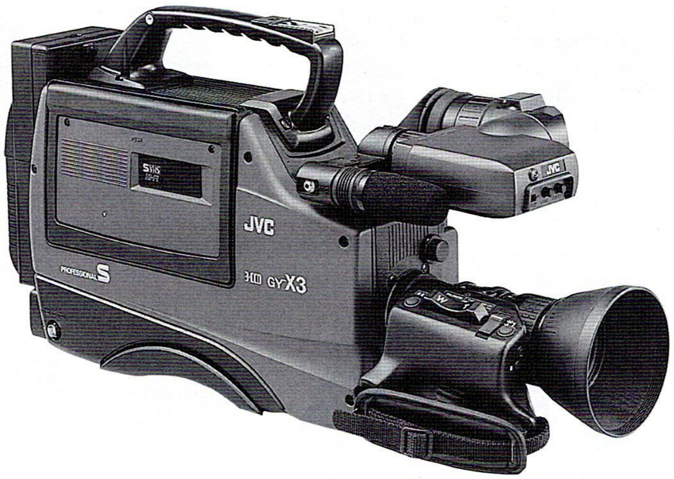
3-CCD Colour Video Camcorder

PROFESSIONAL S

GY-X3E

S-VHS 625 VHS PAL

- **3-CCD: Three high sensitivity 1/3" CCDs achieve F8 at 2,000 lux.**
- **Low Light Performance: In the Maximum Gain Mode, at illumination levels as low as 4 lux, the GY-X3E delivers excellent pictures at 100% video level.**
- **Full-size Head Drum: A built-in professional S-VHS VCR with full-size head drum gives top-quality recordings for up to 3 hours, using an SE-180 cassette.**
- **Low Noise Pictures: Newly designed 1/3" CCDs supported by advanced electronics achieve an excellent signal-to-noise ratio of 58 dB.**
- **Continuous Auto Black circuit eliminates auto black manual switching.**
- **Fujinon 1.4x servo zoom lens provided**
- **Time/Date generator standard**
- **2-channel Hi-Fi audio and Linear Audio (mix)**
- **Built-in CTL-time code generator**

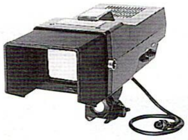


CAMERA SECTION	
Image pickup device:	1/3" IT CCD x 3
Colour separation system:	F1.4, 3-colour separation prism
Number of effective pixels:	290,000 pixels
Colour system:	PAL (R-Y, B-Y encoder)
Optical filter:	3200K, 3200K+6.3% ND
Horizontal resolution:	550 TV lines
Sensitivity:	F8, 2000 lux
Minimum illumination:	4 lux with F1.4 max. gain
S/N ratio:	58 dB (luminance signal)
Gain:	0 dB, 6 dB, ALC, 24 dB (MAX. GAIN)
Variable scan:	1/50 to 1/2000 sec.
Detail correction:	Horizontal dual-edged, Vertical dual-edged
Microphone:	Superdirectional electric condenser microphone
Viewfinder:	1.5" B&W viewfinder
VCR SECTION	
Format:	VHS/S-VHS EUROPE standard
Tape speed:	23.39 mm/sec.
Record/playback time:	180 min. (with SE-180 cassette)
Horizontal resolution:	400 lines or more (S-VHS mode)
Video S/N ratio (colour):	44 dB (S-VHS mode)
Audio S/N ratio:	44 dB

ZOOM LENS	
Focal length:	5.5 to 77 mm (zoom ratio 14:1)
Max. aperture ratio:	F/1.4
Focus range:	1.0 mm to ∞
Front thread diameter:	62 mm, P=0.75 mm
Iris range:	F/1.4 to 16, close
INPUT/OUTPUT SIGNALS	
Video signal output:	VBS 1 V(p-p)/75 ohms (BNC)
Audio output (ø3.5 min-jack): :	Ch1 (L): –10 dBs Ch2 (R): –10 dBs
Camera microphone input:	–70 dBs (with the built-in microphone), 4.7k ohms unbalanced
Audio input:	+4 dBs/10k ohms unbalanced
Audio input:	+4 dBs/10k ohms or –60 dBs/3k ohms (selectable) equivalent to XLR-3-32, balanced
GENERAL	
Power requirement:	12 V DC (10.5V to 18V permissible battery range)
Power consumption:	19.4 W under REC/PAUSE mode conditions
Weight:	5.8 kg (12.8 lbs)
Operating temperature range:	0°C to 40°C (32°F to 104°F)
Storage temperature range:	–20°C to +60°C (–4°F to + 140°F)
PROVIDED ACCESSORY	
Quick-release tripod adapter plate	

GY-X2BE Optional Accessories

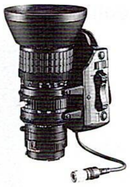
VF-P400E
4" Viewfinder



YH14x7.3K12U (CANON)
14:1 Power Zoom Lens

YH18x6.7K12U (CANON)
18:1 Power Zoom Lens

S14x7.5B12U (FUJINON)
14:1 Power Zoom Lens



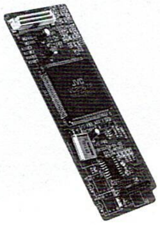
S18x6.7B12U (FUJINON)
18:1 Power Zoom Lens

HZ-FM13U
Focus Manual Control Unit for S18×6.7B12U and S14×7.5B12U

HZ-FM15U
Focus Manual Control Unit for YH14×7.3KRS and YH18×6.7K12U

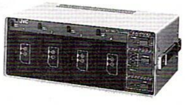
HZ-ZS13BU
Zoom Servo Control Unit for YH14×7.3K12U, YH18×6.7K12U, S18×6.7B12U and S14×7.5B12U

SA-R200E
Time Code Generator



AA-P250E
AC Power Adapter/ Charger and 5m DC Cable

AA-G10E
Battery Charger/ AC Power Adapter



NB-G1U
Ni-Cd Battery (2.2 Ah)

MV-P612U/ MV-P616U
Stereo/Super Directional Microphones

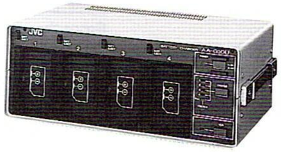
KA-A30U Mic Holder

CB-P27U Carrying Case

GY-X3E Optional Accessories

AA-P250E
AC Power Adapter/Charger

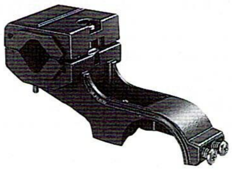
AA-G10E
Battery Charger/AC Power Adapter



NB-G1U
Ni-Cd Battery (2.2 Ah)

CB-P27U Carrying Case

KA-A3U
Mic Holder



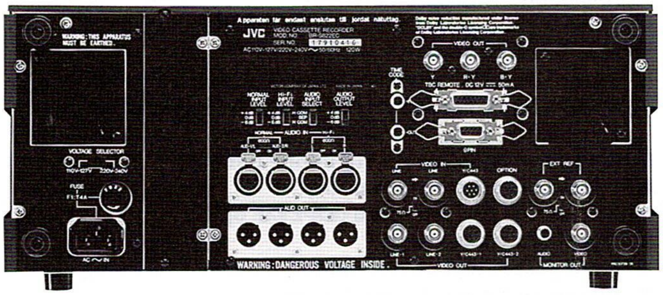
Editing Recorder

PROFESSIONAL S

BR-S822E

S-VHS 625 VHS PAL S-VHS C 625 VHS PAL

- Full-size/compact-compatible cassette loading mechanism
- Max. 180 min. Recording/Playback capability
- Max. 32 times normal speed search capability (C cassette: ±14 times normal speed)
- Open-ended system architecture with plug-in TC and TBC capability
- High-quality pictures*: chroma enhancer, digital Y/C separator, digital luminance comb filter, and digital DOC
- Fully-equipped for high-performance professional editing
- Provided RS-422 remote control interface with swap control capability and optional RS-232C remote port/JVC 45-pin parallel port
- Tiltable control panel with Search/JOG dial
- Menu Display and On-Screen Mode Check
- Hi-Fi Stereo system with a dynamic range of more than 90 dB
- Two-channel normal audio with switchable Dolby B* noise reduction
- Independent audio level controls for all four channels
- XLR balanced audio connectors
- 2 level meters switchable between Hi-Fi and Normal audio
- 8-Digit time counter for indication of editing data in either TC or CTL
- Reference video input with bridge-out
- Y-Frequency Response Control
- 3/4" dub output interface (SA-E92E option)
- Heavy-duty mechanism
- Front-access test points and self-diagnostic warning system
- Automatic head cleaning mechanism
- 9999-hour meter switchable from tape counter
- Headphones jack with adjustable level output
- 19-inch EIA rack mount capability



Shown with optional interface accessory

* Technology licensed by FAROUDJA Laboratories.
* Employs chroma-enchancing technology co-developed by JVC and FAROUDJA Laboratories and modified for S-VHS applications.
* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. Dolby and the Double-D symbol DOLBY B NR are trademarks of Dolby Laboratories Licensing Corporation.

GENERAL

Format: VHS PAL/S-VHS EUROPE standard

Power requriement: AC 110-120/220-240 V ~ 50/60 Hz

Power consumption: 100 watts (max. 130 watts with the Automatic Editing Control Unit, DC 12 V, 550 mA)

Dimensions: 429 (W) x 188 (H) x 565 (D) mm

Weight: 23 kg

Operating temperature: 5°C to 40°C

Storage temperature: –20°C to 60°C

Tape speed: 23.39 mm/sec.

Recording & Playback time: Max: 180 min. with JVC SE-180

Fast forward/Rewind time: Less than 2.5 min. for 180 min. tape

Search speed: Dial Search FWD/REW X ± 1/30 to X ± 32

VIDEO

Recording and playback: Rotary two-head, helical scanning system
Luminance: FM recording
Colour signal: Phase shift, converted subcarrier direct recording

Video signal system: PAL-type colour signal/ PAL-type Y/C signal

Input
Line: 1.0 Vp-p, 75 ohms, unbalanced
Y/C443 Y: 1.0 Vp-p, 75 ohms, unbalanced
C: 0.3 Vp-p, 75 ohms, unbalanced (Burst)

Output
Line: 1.0 Vp-p, 75 ohms, unbalanced
Y/C443 Y: 1.0 Vp-p, 75 ohms, unbalanced
C: 0.3 Vp-p, 75 ohms, unbalanced (Burst)

Signal-to-noise ratio: More than 46 dB (S-VHS)

Horizontal resolution:More than 400 lines (S-VHS)
More than 250 lines (VHS)

Reference video input: 1.0 Vp-p, 75 ohms, unbalanced (with one loop-through, with the SA-T22E)

EXT. SYNC input: 0.5 to 4.0 Vp-p, 75 ohms, unbalanced (with one loop-through, without the SA-T22E)

AUDIO

Input
Line: –6/0 + 4 dBs, 10 k-ohms/600 ohms, balanced (Hi-Fi/Normal)
Mic: – 67 dBs, 10 k-ohms, unbalanced

Output
Line: –6/0/+ 4 dBs, Low impedance, balanced (Hi-Fi/Normal)
Monitor: – 6 dBs, Low impedance, unbalanced
Phones: ∞ to -17 dBs, 8 ohms

Signal-to-noise ratio: More than 42 dB (NR-off) (Normal)

Dynamic range: More than 87 dB (Hi-Fi)

Frequency response: 20 to 20,000 Hz (Hi-Fi)
40 to 12,000 Hz (Normal)

Wow and flutter: Less than 0.005% WRMS (Hi-Fi)
Less than 0.25% RMS (Normal)

Time Code
Input: 0. dB ± 6 dBs, 10 k-ohms
Output: 0 dB ± 3 dBs, Low impedance

CONNECTORS

Video
Line input:BNC-type connectors
Line output: BNC-type connectors
Y/C443 input/output: 7-pin connectors
Monitor: BNC-type connector

Audio
Hi-Fi input/output: XLR connectors
Normal input/output: XLR connectors
Monitor: RCA connector

Remote control: 9-pin connector

Accessory: 7-pin cable

BR-S622E

S-VHS 625 VHS PAL S-VHS C 625 VHS PAL

- Full-size/compact-compatible cassette loading mechanism
- Maximum 180 min. recording/playback capability
- Max. ±32 times normal speed search function (C cassette: ±14 times normal speed)
- Open-ended system architecture with plug-in TC and TBC capability
- High-quality pictures*: chroma enhancer, digital Y/C separator, digital luminance comb filter, and digital DOC
- Menu Display and On-Screen Mode Check
  Provided RS-422 serial remote interface and optional RS-232C serial and parallel 45-pin interface
- Tiltable control panel with Search/JOG dial
- Hi-Fi Stereo system with a dynamic range of more than 90 dB
- Two-channel normal audio with switchable Dolby B* noise reduction
- Independent audio level controls for all four channels
- XLR balanced audio connectors
- 2 Level meters switchable between Hi-Fi and Normal audio
- 8-Digit time counter for indication of editing data in either TC or CTL
- Reference video input with bridge-out
- Y-Frequency Response Control
- 3/4" dub output I/F board (SA-E92E option)
- Heavy-duty mechanism
- Front-access test points and self-diagnostic warning system
- Automatic head cleaning mechanism
- 9999-hour meter switchable from tape counter
- Headphones jack with adjustable level output
- 19-inch EIA rack mount capability

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* Employs chroma-enhancing technology co-developed by JVC and FAROUDJA Laboratories and modified for S-VHS applications.
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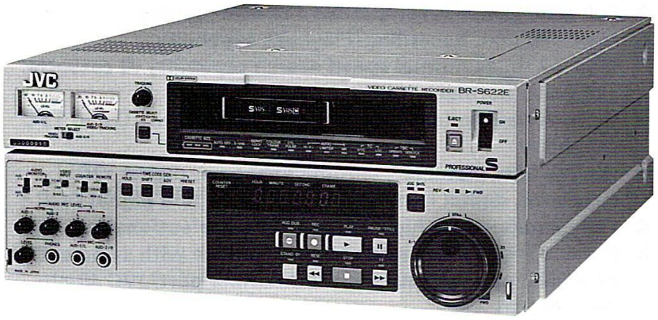
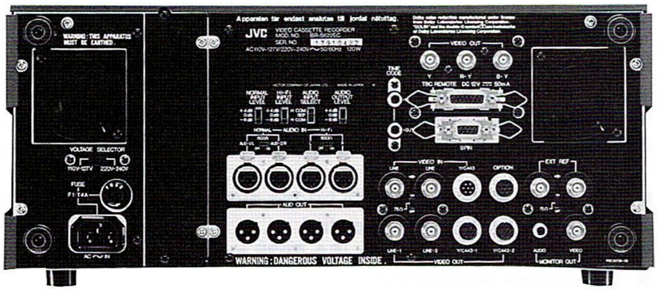




Shown with optional interface accessory

GENERAL

Format: VHS PAL/S-VHS EUROPE standard

Power requirement: AC 110-120/220-240 V~50/60 Hz

Power consumption: 100 watts
(max. 130 watts with the Automatic Editing Control Unit, DC 12 V, 550 mA)

Dimensions: 429 (W) × 188 (H) × 565 (D) mm

Weight: 23 kg

Operating temperature: 5°C to 40°C

Storage temperature: – 20°C to 60°C

Tape speed: 23.39 mm/sec.

Recording & Playback time: Max. 180 min. with JVC SE-180

Fast forward/Rewind time:
Less than 2.5 min. for 180 min. tape

Search speed: Dial Search FWD/REW
× ± 1/30 to × ± 32 (Full Cassette)

VIDEO

Recording and playback: Rotary two-head, helical scanning system
Luminance: FM recording
Colour signal: Phase shift, converted sub-carrier direct recording

Video signal system: PAL-type colour signal/PAL-type Y/C signal

Input
Line: 1.0 Vp-p, 75 ohms, unbalanced
Y/C443 Y: 1.0 Vp-p, 75 ohms, unbalanced
C: 0.3 Vp-p, 75 ohms, unbalanced (Burst)

Ouput
Line: 1.0 Vp-p, 75 ohms, unbalanced
Y/C443 Y: 1.0 Vp-p, 75 ohms, unbalanced
C: 0.3 Vp-p, 75 ohms, unbalanced (Burst)

Signal-to-noise ratio: More than 46 dB (S-VHS)

Horizontal resolution: More than 400 lines (S-VHS)
More than 250 lines (VHS)

Reference video input: 1.0 Vp-p, 75 ohms, unbalanced (with one loop-through, with the SA-T22E)

EXT.SYNC input: 0.5 to 4.0 Vp-p, 75 ohms, unbalanced (with one loop-through, without the SA-T22E)

AUDIO

Input
Line: –6/0+ 4 dBs, Low impedance, balanced (Hi-Fi/Normal)
Mic: –67 dBs, 10 k-ohms, unbalanced

Output
Line: –6/0/+ 4 dBs, Low impedance, balanced (Hi-Fi/Normal)
Monitor: –6 dBs, Low impedance, unbalanced
Phones: ∞ to –17 dBs, 8 ohms

Signal-to-noise ratio: More than 42 dB (NR-off) (Normal)

Dynamic range: More than 87 dB (Hi-Fi)

Frequency response: 20 to 20,000 Hz (Hi-Fi)
40 to 12,000 Hz (Normal)

Wow and flutter: Less than 0.005% WRMS (Hi-Fi)
Less than 0.25% RMS (Normal)

Time code
Input: 0. dB ± 6 dBs, 10 k-ohms
Output: 0 dB ±3 dBs, Low impedance

CONNECTORS

Video
Line input: BNC-type connector
Line output: BNC-type connectors
Y/C443 input/output: 7-pin connectors
Monitor: BNC-type connector

Audio
Hi-Fi input/output: XLR connectors
Normal input/output: XLR connectors
Monitor output: RCA PW connector

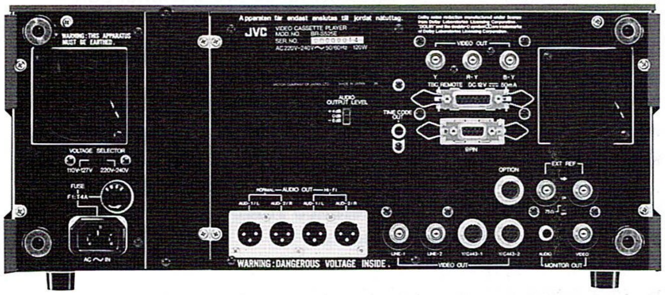
Remote control: 9-pin connector

SA-K63UB
Rack Mount Adapter (option)

BR-S525E

VHS PAL 625 VHS PAL 625

- High-quality variable-speed playback and programmable playback
- Field-by-field playback
- Built-in TBC and Digital noise reducer with component signal outputs
- High-quality pictures with max. ±32 times normal speed search
  (C cassette: ±14 times normal speed)
- Full-size/compact-compatible cassette loading mechanism
- Menu Display and On-Screen Mode Check
- RS-422A 9-pin serial remote interface
- Optional plug-in time code reader (LTC/VITC)
- Hi-Fi stereo system with a dynamic range of more than 87 dB
- Two-channel normal audio with switchable Dolby B* noise reduction
- Independent audio output level controls for all four channels
- Four XLR balanced audio output connectors
- 2 level meters switchable between Hi-Fi and normal audio
- 8-Digit counter for tape position indication in either TC or CTL mode
- Jog/shuttle dials
- High-speed visual search at up to 32x (10x with C-size cassettes)
- External sync input for reference video
- Y-Frequency Response Control
- Automatic H-phase lock
- Wide-format (16:9) playback capability
- Tiltable control panel
- Heavy-duty mechanism
- Self-diagnostic warning system
- Front-access test points
- Automatic head cleaning mechanism
- 9999-hour meter switchable from tape counter
- Headphone jack adjustable level output
- 19-inch EIA rack mount capability



* Dolby and the Double-D symbol DOLBY B NR are trademarks of Dolby Laboratories Licensing Corporation.

GENERAL

Format: VHS/S-VHS EUROPE standard

Power requirement: 110-127/220-240 AC V, 50/60 Hz

Power consumption: 120 W

Dimensions: 429 (W) × 188 (H) × 565 (D) mm

Weight: 23 kg

Operating temperature: 0°C to 40°C

Storage temperature: -20°C to 60°C

Tape speed: 23.39 mm/sec.

Playback time: Max. 180 min. with JVC SE-180

Fast forward/Rewind time: Less than 2.5 min. for 180 min. tape

Search speed: Dial search FWD/REW ±1/30 to ±32

Variable playback speed: FWD +1/30 to +3, REW -1/30 to -2

VIDEO

Playback: Rotary two-head helical scanning system

Luminance: FM recording

Colour: Phase shift, converted sub-carrier direct recording

Video signal system: PAL-type colour signal/PAL-type Y/C signal

Output:
  Line: 1.0 Vp-p, 75 ohms, unbalanced
  Y/C 443: Y: 1.0 Vp-p, 75 ohms, unbalanced
  C: 0.3 Vp-p, 75 ohms, unbalanced (Burst)

Signal-to-noise ratio: More than 46 dB (S-VHS)
More than 45 dB (VHS)

Horizontal resolution: More than 400 lines (S-VHS)
More than 250 lines (VHS)

Reference video input: 1.0 Vp-p, 75 ohms, unbalanced (with one loop-thorough TBC ON)

AUDIO

Output
  Line: -6/0/+4 dBs, low impedance, balanced (Hi-Fi/Normal)

Monitor: -6 dBs, low impedance, unbalanced

Phones: ∞ to -17 dBs, 8 ohms

Signal-to-noise ratio: More than 43 dB (NR-off, Normal)

Dynamic range: More than 87 dB (Hi-Fi)

Frequency response: 20 to 20,000 Hz (Hi-Fi)
40 to 12,000 Hz (Normal)

Wow and flutter: Less than 0.005%, WRMS (Hi-Fi)
Less than 0.25% RMS (Normal)

Time code: Output: 0 dB ±3 dBs, low impedance

CONNECTORS

Video:
  Line output: BNC-type connectors
  Y/C 443 output: 7-pin connectors
  Monitor: BNC-type connector
  Component output (Y/R-Y/B-Y): BNC-type connectors

Audio:
  Hi-Fi output: XLR connectors
  Normal output: XLR connectors
  Monitor output: RCA Type pin connector

Remote control: 9-pin connector

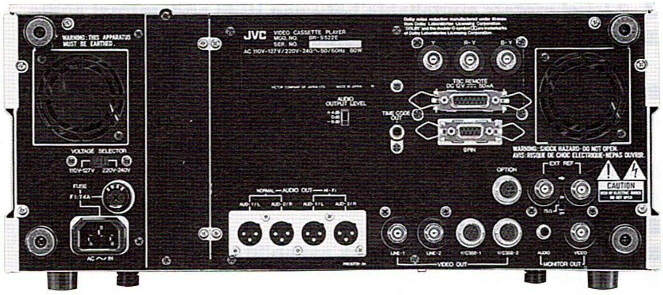
TBC remote: 15-pin connector

BR-S522E

SVHS 625 VHS PAL
SVHSC 625 VHS PAL

- **Full-size/compact-compatible cassette loading mechanism**
- **Maximum 180 min. playback capability**
- **Max. ±32 times normal speed search capability (C cassette: ±14 times normal speed)**
- **Open-ended system architecture with plug-in TC and TBC capability**
- **High-quality pictures chroma enhancer, digital Y/C separator, digital Luminance comb filter, and digital DOC**
- **Menu Display and On-Screen Mode Check**
- **Provided RS-422 remote interface and optional RS-232C serial and JVC 45-pin parallel remote interface**
- **Hi-Fi stereo system with a dynamic range of more than 87 dB**
- **Two-channel normal audio with switchable Dolby B* noise reduction**
- **Independent audio output level controls for all four channels**
- **Fully-equipped for high-performance professional edit feeding**
- **Preroll function**
- **Tiltable control panel with Search/JOG dial**
- **Four XLR balanced audio output connectors**
- **2 level meters switchable between Hi-Fi and Normal audio**
- **8-Digit counter for tape position indication in either TC or CTL mode**
- **External sync input for reference video**
- **Y-Frequency Response Control**
- **Heavy-duty mechanism**
- **Self-diagnostic warning system**
- **Front-access test points**
- **Automatic head cleaning mechanism**
- **9999-hour meter switchable from tape counter**
- **19-inch EIA rack mount capability**
- **Headphone jack with adjustable level output**

* Dolby and the Double-D symbol DOLBY B NR are trademarks of Dolby Laboratories Licensing Corporation.



Shown with optional interface accessory

GENERAL

Format: VHS/S-VHS Europe standard

Power consumption: 80W

Power requirement: AC 110-127 V/220-240 V~ 50/60 Hz

Dimensions: 429 (W) × 188 (H) × 565 (D) mm

Weight: 23 kg

Operating Temperature: 5°C to 40°C

Storage temperature: -20°C to 60°C

Tape speed: 23.39 mm/sec

Recording & Playback time: Max. 180 min, with JVC SE-180

Fast forward/Rewind time: Less than 2.5 min. for 180 min, tape

VIDEO

Playback: Rotary two-head helical scanning system

Luminance: FM recording

Colour signal: Phase shift, converted sub-carrier direct recording

Video signal system: PAL-typs colour signal/ PAL-type Y/C signal

Output
Line : 1.0 Vp-p, 75 ohms, unbalanced
Y/C 443: Y : 1.0 Vp-p, 75 ohms, unbalanced
C : 0.3 Vp-p, 75 ohms, unbalanced (Burst)

Signal-to-noise ratio: More than 46 dB (S-VHS)
More than 45 dB (VHS)

Horizontal resolution: More than 400 lines (S-VHS)
More than 250 lines (VHS)

Reference video input: 0.3 to 1.0 Vp-p, 75 ohms, unbalanced (with loop-through, with the SA-T22E)

External sync input: 0.5 to 4.0 Vp-p, 75 ohms, unbalanced (with one loop-through, without the SA-T22E)

AUDIO

Output
Line: –6/0/+4 dBs, Low impedance, balanced (Hi-Fi/Normal)
Monitor: –6 dBs, Low impedance, unbalanced
Phones: ∞ to-17 dBs, 8 ohms

Signal-to-noise ratio: More than 43 dB (NR-off, Normal at 3% distortion)

Dynamic range: More than 87 dB (Hi-Fi)

Frequency response: 20 to 20,000 Hz (Hi-Fi) 40 to 12,000 Hz (Normal)

Wow & flutter: Less than 0.005% WRMS (Hi-Fi)
Less than 0.3% RMS (Normal)

TIME CODE
Output: 0 dB ±3dBs, Low impedance, unbalanced

CONNECTORS

Video
Line output: BNC-type connectors
Y/C 443 output: 7-pin connectors
Monitor: BNC-type connector

Audio
Hi-Fi output: XLR connectors
Normal Output: XLR connectors
Monitor: RCA connector

Remote control: 9-pin connector

Editing Recorder and Feeder/Player

PROFESSIONAL S

BR-S800E/BR-S500E

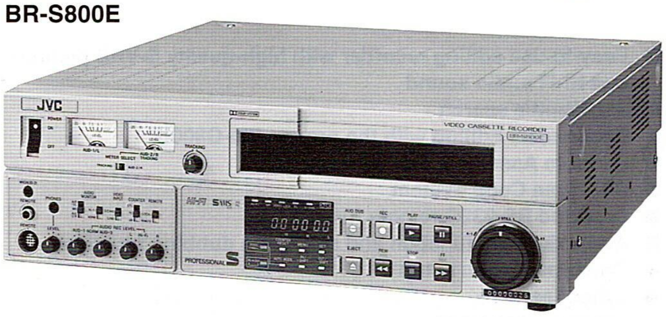
VHS
PAL
625

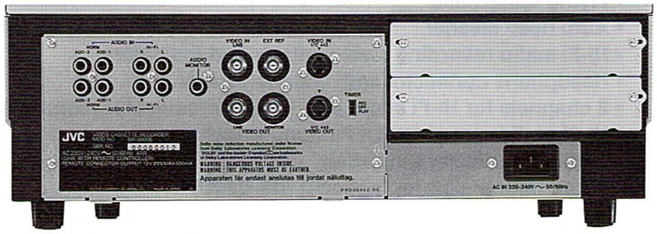
- S-VHS recorder with editing recorder capability (BR-S800E) and S-VHS player with editing feeder capability
- High quality pictures by digital Y/C separator (BR-S800E)
- Open-ended system architecture with plug-in TC, DNR, RS-232C I/F and RS-422A I/F capability
- Menu Display and On-screen mode check
- ±33 times normal speed search system with search dial
- Hi-Fi Stereo system with a dynamic range of more than 85 dB
- Two-channel normal audio with switchable Dolby B* noise reduction
- Two level meters switchable between Hi-Fi audio and normal audio
- Independent audio record level controls for four channels (BR-S800E)
- Six-Digit time counter for indiction of either CTL Time-code and CTL data
- Provided CTL time-code generator/reader (BR-S800E)
- Provided CTL time-code reader (BR-S500E)
- Audio dubbing capability (BR-S800E)
- External timer playback/recording capability (BR-S800E)
- Automatic repeat playback and counter search capability
- Headphones jack with adjustable level output.
- External sync capability
- Wired remote control capability (RM-G30U)
- Automatic head cleaning mechanism
- Audio monitor output
- Two composite video signal outputs
- Heavy-duty mechanism.
- 19-inch EIA rack mount capability (4-unit)

* A Y/C filtering technique incorporated under license from FAROUDJA Laboratories Inc.

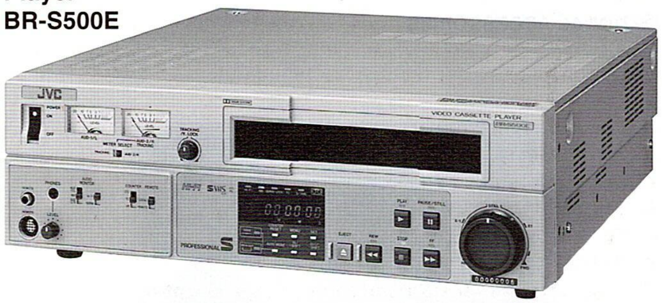
* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. Dolby and the Double-D symbol DOLBY B NR are trademarks of Dolby Laboratories Licensing Corporation.

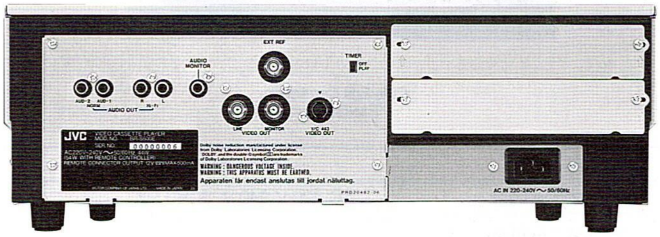
Recorder
BR-S800E





Player
BR-S500E





GENERAL	
Format:	VHS/S-VHS Europe standard
Power requirement:	AC 220 -240 V ~, 50/60 Hz
Power consumption:	49W (59W when using RM-G800U and BR-S800E) 44W (54W when using RM-G800U and BR-S500E)
Dimensions:	430 (W) × 130 (H) × 460 (D) mm
Weight:	11.5 kg
Operating temperature:	+5°C to 40°C
Storage temperature:	-20°C ~ 60°C
Operating humidity:	30% to 80%
Tape speed:	23.39 mm/sec
Recording/Playback time: (BR-S800E)	Max. 120 min. (SP mode) Max. 360 min. (LP mode/PB only) with SE-180/E-180
FF/REW time:	2.5 min. with SE-180/E-180
Search speed:	Dial search FWD/REV ×± 1/30 to × 33

VIDEO	
Recording & playback: (BR-S800E) Luminance: Chrominance:	Rotary four-head, helical scan system FM Recording Phase shift, converted sub-carrier direct recording
Video signal system:	PAL-type colour signal/ PAL-type Y/C signal
Input (BR-S800E) Line: Y/C443 (4-pin):	 0.5 to 2.0 Vp-p, 75 ohms, unbalanced Y: 0.5 to 2.0Vp-pm 75 ohms, unbalanced C: 0.3Vp-p, 75 ohms, unbalanced (Burst)
Output Line: Y/C443 (4-pin):	 1.0Vp-p, 75ohms, unbalanced Y: 1.0Vp-p, 75 ohms, unbalanced C: 0.3Vp-p, 75 ohms, unbalanced (Burst)
Signal to noise ratio:	More than 45 dB (S-VHS SP) More than 45 dB (VHS SP)
Horizontal resolution:	More than 400 lines (S-VHS-SP) More than 240 lines (VHS SP)
External Sync input:	0.5 to 4.0Vp-p, 75 ohms, unbalanced

AUDIO	
Input (BR-S800E) Line: Mic:	 -6 dB, 10k-ohms, unbalanced -67 dB, 3k-ohms, unbalanced
Output Line: Monitor:	 -6 dB, 1k-ohms, unbalanced -6 dB, 1k-ohms, unbalanced
Headphones:	-∞ to -20 dB, 8 ohms, unbalanced
Signal to noise ratio:	40 dB (NR:OFF/SP mode)
Dynamic range:	85 dB (Hi-Fi)
Frequency response:	50 to 10,000 Hz (Normal) 20 to 20,000 Hz (Hi-Fi)
Wow and flutter:	Less than 0.25% RMS (Normal) Less than 0.006% (Hi-Fi)

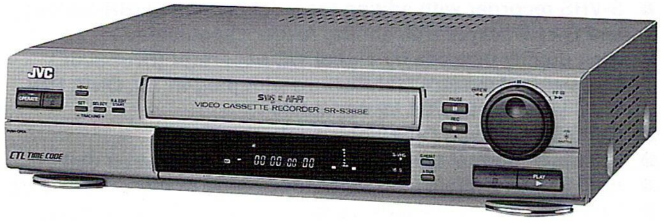
All model numbers, specifications and prices are subject to change without notice.

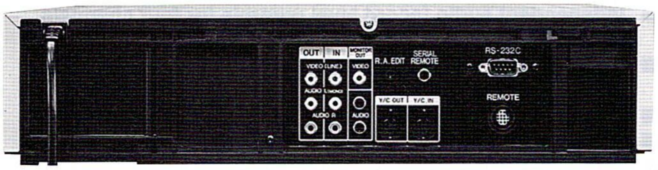
Editing Recorder/Player S-VHS

SR-S388E

SVHS 625
VHS
PAL

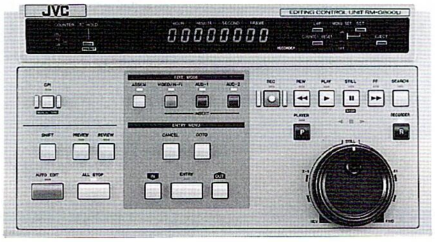
- **Easy-to-use editing recorder with high-quality S-VHS pictures and Hi-Fi audio sound**
- **Jog/Shuttle search**
- **Economical Editing with the proven RM-G800U***
- **Random Assemble Editing function**
- **CTL Time Code System**
- **Provided RS-232C remote function**
- **Audio dubbing function and self audio dubbing function**
- **On-screen menu setup**
- **Other Features**
  - **Fiying erase head**
  - **Auto head cleaner**
  - **Hi-Fi audio recording level controls and indicators**
  - **Headphone connector with volume control**
  - **2 channels for Hi-Fi audio and 1 linear channel for monaural**
  - **Hi-Fi audio record ON/OFF (menu switch)**
  - **Digital hour meter indication**
  - **Wired remote control (optional RM-G30U)**





* A Y/C filtering technique incorporated under license from **FAROUDJA** Laboratories Inc.

OPTIONAL ACCESSORIES



Cuts Edit Controller
RM-G800U

VC-G8030U cable

GENERAL	
Power requirement	AC 220 V-240 V, 50/60 Hz
Power consumption	22 W
Temperature	Operating: 5°C to 40°C(41°F to 104°F) Storage: –20°C to 60°C(–4°F to 140°F)
Humidity	Operating: 35% to 80% Storage: 5% to 80%
Operating position	Horizontal only
Dimensions (W x H x D)	400 × 94 × 340 mm (15-5/8" × 3-3/4" × 13-7/16")
Weight:	5 kg (10.6 lbs.)
Format:	VHS/S-VHS standard
Tape width	12.65 mm
Tape speed	(SP): 23.39 mm/sec (LP): 11.70 mm/sec
Maximum recording time	(SP): 3 hours with SE-180 video cassette (LP): 6 hours with SE-180 video cassette
Rewind/fast-forward time	Approx. 2 minutes, with SE-180 video cassette
VIDEO	
Signal system	PAL-type colour signal/PAL-type Y/C signal
Recording system	Rotary two head helical scan system Luminance: FM recording Colour: Down-covered direct recording
Input	Line: 0.5 to 2.0 Vp-p 75 ohms, unbalanced Y/C: Y: 1.0 Vp-p, 75 ohms, unbalanced C: 0.3 Vp-p, 75ohms, unbalanced (Burst)
Output	Line: 1.0 Vp-p, 75 ohms, unbalanced Y/C: Y: 1.0 Vp-p, 75 ohms, unbalanced C: 0.3 Vp-p, 75 ohms, unbalanced (Burst)
Signal-to-noise ratio	43 dB or more (S-VHS and SP modes)
Horizontal resolution	400 lines (S-VHS) 240 lines (VHS)
AUDIO	
Recording system	2 Hi-Fi tracks/monaural longitudinal track
Input	Line: –8 dBs, 50 k-ohms, unbalanced
Output	Line: –8 dBs, 1 k-ohm, unbalanced Phones: Variable, 40 ohms, unbalanced, ø3.5, –11 dBs (max)
Frequency response	20 Hz to 20 kHz (Hi-Fi) 100 Hz to 10 kHz (Normal, SP mode)
Dynamic range	85 dB or more (Hi-Fi)
Wow & flutter	0.006% WRMS or less (Hi-Fi) 0.30% RMS or less (Normal, SP mode)
ACCESSORY	
Provided	Y/C cable × 1

S-VHS Optional Accessories (1)

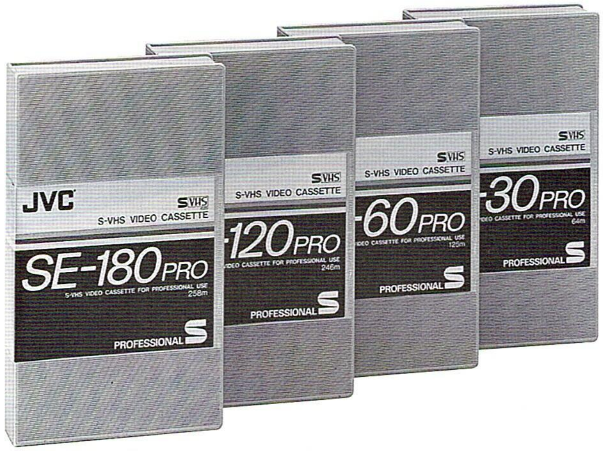
S-VHS 625 VHS PAL

AA-G10E
AC adapter/battery charger
Charges X4 NB-G1U battery packs

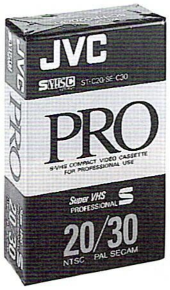
NB-G1U
Rechargeable battery for BR-S422E/
GY-X2BE/GY-X3E/BR-DV10E/BR-D40E and
TM-600PN monitor (2.2 AH)

RM-G30U
Remote control unit

PROFESSIONAL S TAPES



SE-180 PRO, SE-120 PRO, SE-60 PRO, SE-30 PRO



ST-C20/30 PRO
(S-VHS-C Professional Tape)

S-VHS CABLES

VC-G1050U

VC-G1035U

VC-G1025U

VC-G1015U

VC-G2050U

VC-G3030U

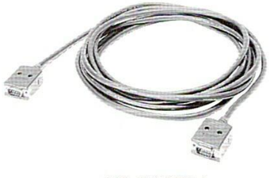
VC-G30U

VC-G50U

CONTROL CABLES

VC-G7050U

VC-G8030U

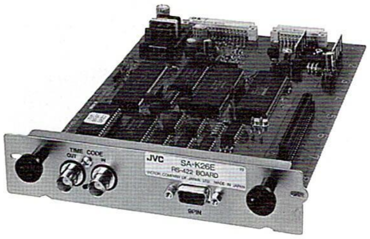


VC-G9050U

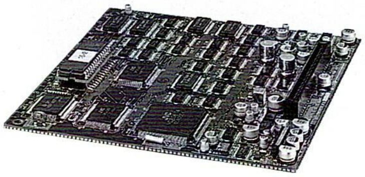
S-VHS CABLES		
Model No.	Description	Length
VC-G1015U **VC-G1025U** **VC-G1035U** **VC-G1050U**	7-pin male to 7-pin female (Y/C cable)	1.5 m (4.75 ft) 2.5 m (8 ft) 3.5 m (11 ft) 5.0 m (16 ft)
VC-G30U **VC-G50U**	4-pin S-connector to 4-pin S-connector (Y/C cable)	3.0 m (9.75 ft) 5.0 m (16 ft)
VC-G2030U **VC-G2050U**	7-pin male to 4-pin S-connector (Y/C cable)	3.0 m (9.75 ft) 5.0 m (16 ft)
VC-G3030U	4-pin S-connector to 7-pin female (Y/C cable)	3.0 m (9.75 ft)
CONTROL CABLES		
VC-G7050U	45-pin male to 45-pin female Remote control cable	5.0 m (16 ft)
VC-G8030U	12-pin to 12-pin connectors Extension cable	3m (9.75 ft)
VC-G9050U	9-pin male to 9-pin female Remote control cable	5.0 m (16 ft)

S-VHS Optional Accessories (2)

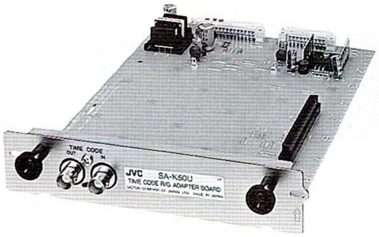
S-VHS 625 VHS PAL


TIME CODE
JVC SA-K26E
RS-422 BOARD

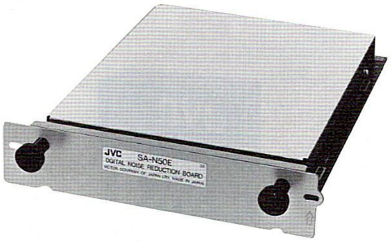
SA-K26E
RS-422 Interface Board
for BR-S800E series



SA-R50E
EBU time code
Generator/Reader Board
for BR-S800E series

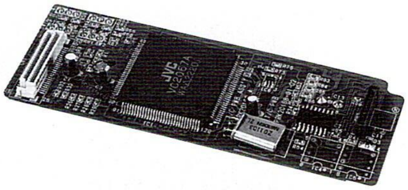

TIME CODE
JVC SA-K50U
TIME CODE R/G ADAPTER BOARD

SA-K50U
SA-R50U adapter board
for BR-S800E series

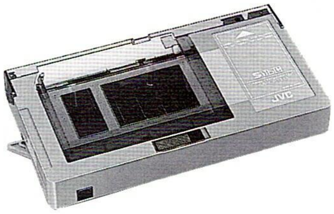

JVC SA-N50E
DIGITAL NOISE REDUCTION BOARD

SA-N50E
Digital Noise Reducer
Board for BR-S800E series

RM-G77U
Serial Remote
Controler for Duplicator
Functions that can be controlled with the RM-G77U: PLAY/STOP/REC/FF/REW REC-PAUSE/PAUSE/EJECT/Hi-Fi ON/OFF



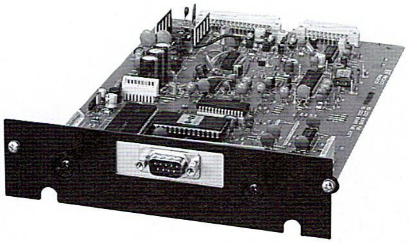
SA-R200E
TC Generator
for BR-S422E and GY-X2BE



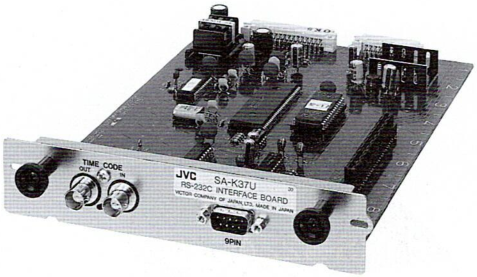
SA-CP11U
Compact Cassette
Adapter

SA-K65U
Rack Mount Kit
for BR-S800E series & BR-S605EB

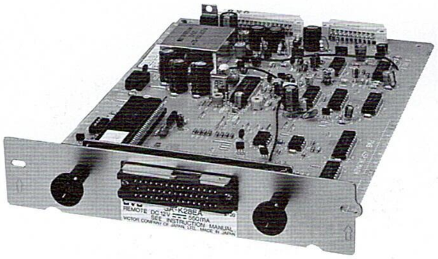
S-VHS Optional Accessories (3)



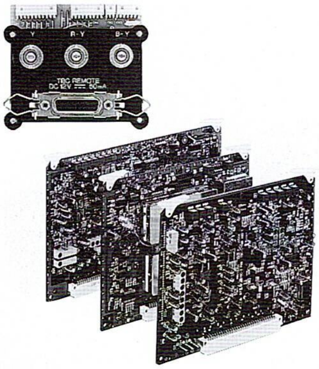
SA-K27EA
RS-232C Remote Board
for BR-S522E, BR-S622E,
BR-S822E,
BR-S800E, BR-S500E and
BR-S605EB



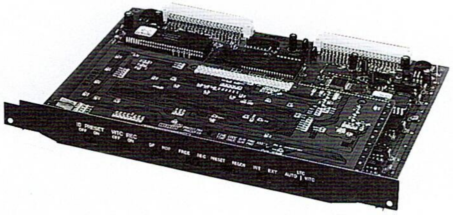
SA-K37E
RS-232C Control I/F Board
for BR-S522E, BR-S622E,
BR-S822E and BR-S800E,
BR-S500E



SA-K28EA
45-pin Remote Board
for BR-S522E, BR-S622E,
BR-S822E, BR-S800E,
BR-S500E and BR-S605EB

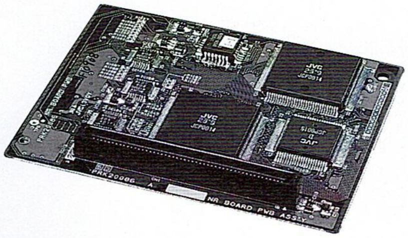


SA-T22E
TBC Board for BR-S522E,
BR-S622E and BR-S822E

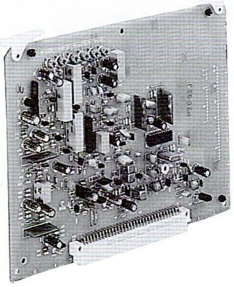


SA-R22E
TC Generator/Reader
for BR-S522E, BR-S525E,
BR-S622E and BR-S822E

SA-K63UB (BEIGE)
Rack Mount Kit for BR-S522E,
BR-S525E, BR-S622E and
BR-S822E



SA-N22W
Digital Noise Reducer
for SA-T22E



SA-E92E
Y/C 924 Output Board
for BR-S522E, BR-S525E,
BR-S622E and BR-S822E

Post Production

Editing Controllers

RM-G820E Digital-S pre-read, RS-422A 53
RM-G870E Digital-S A/B roll, RS-422A 54
RM-G860E A/B roll, RS-422A, 45 pin parallel 55
RM-G800U Cuts Editing, JVC bus 56

Frame Synchroniser / Signal Converter

KM-F250E 57

Special Effects Generators

Digital I/O

KM-5000E Multi-format 19

Component and Y/C

KM-3000E Component Analogue 58
KM-D600E Y/C, Digital Effects 59
KM-1600E Y/C 60

Composite

KM-2500E 2 M/E Bus 61
KM-1200E 1 M/E Bus 61

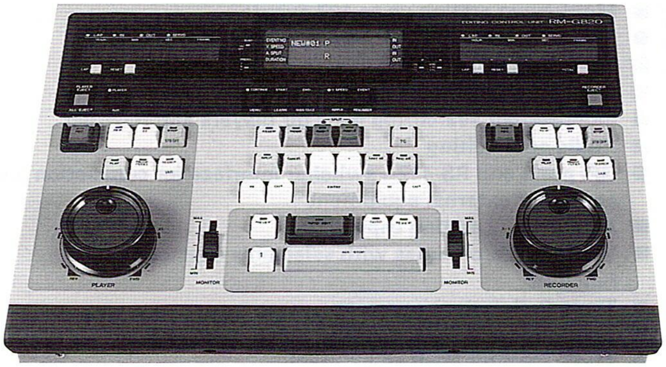
Audio Mixers

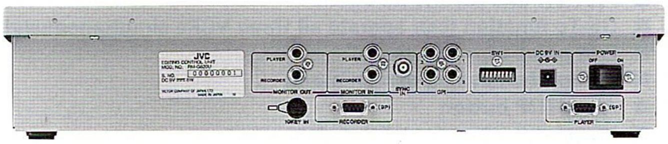
MI-3000E 10-Channel 62
MI-F30E Auto Fader for MI-3000E 62
MI-1200E Professional Audio Mixer 63

Pre-read Editing Control Unit

RM-G820E

- **Controls Digital S Pre-Read: A/B Roll Editing and Layering Using Only Two Machines**
- **RS-422A Interface**
- **Multi-Event Editing Max. 99 events with Renumber and Ripple (EDL manage) function**
- **Variable Motion Control (VMC) editing and Motion Memory Editing (Max. 7 events) with BR-S525E and DIGITAL-S**
- **Time Code (EBU LTC & VITC) and CTL Based Editing Capability**
- **Audio Split Editing**
- **Four Variable Timing GPI (General Purpose Interface) Outputs**
- **Audio Monitor Level Control**
- **Multi Purpose LCD display**


EDITING CONTROL UNIT RM-G820
PLAYER
MONITOR
RECORDER


JVC
EDITING CONTROL UNIT
PLAYER
RECORDER
MONITOR OUT
MONITOR IN
SYNC IN
GPI
DC 9V IN
POWER
OFF
ON
10KEY IN
PLAYER

Power requirement: DC 9 V

Power consumption: 8 W

Weight: 4.8 kg (10.6 lbs)

Dimensions (W × H × D): 430 × 99 × 311 mm

Operating temperature: 5°C to 40°C

Storage temperature: -20°C to 60°C

Operating humidity: 30% to 80%

VCR control functions: PLAY, FF, REW, STOP, PAUSE/STILL, SHUTTLE SEARCH, JOG, EJECT, REC EE, REC

Editing control functions: Edit modes: Assemble and insert

Reference signals: EBU time code, CTL time code or CTL pulse

Capstan bump: ON/OFF (independent)

Editing accuracy: Timecode-referenced in capstan bump mode: ±0 frame (depending on VCR)
CTL-referenced in capstan bump mode: ±2 frames (depending on VCR)

Memory capacity: 99 events

VCR interface: RS-422A (9-pin)

Preroll time: 5, 7 or 10 sec.

Number of VCRs controllable: 1 player and 1 recorder

Time counter

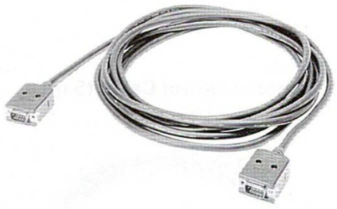
Counter reading display: Up to 23 hours, 59 minutes, 59 seconds, 24 frames (TC/CTL 24-hour display) from –9 hours to 9 hours, 59 minutes, 59 seconds, 24 frames (CTL 10-hour display)

Total programme time display: Maximum 11 hours, 59 minutes, 59 seconds, 24 frames

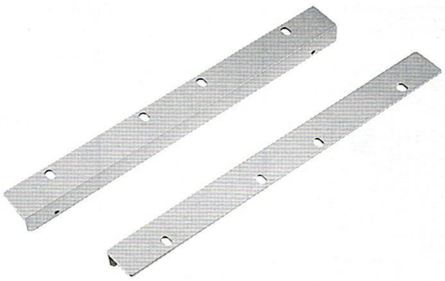
Accessories: AC adaptor, Power cord

Optional Accessories

VC-G9050U
9-pin Remote Control Cable (5m/16 ft.)



SA-K66U
Rack Mount Adapter



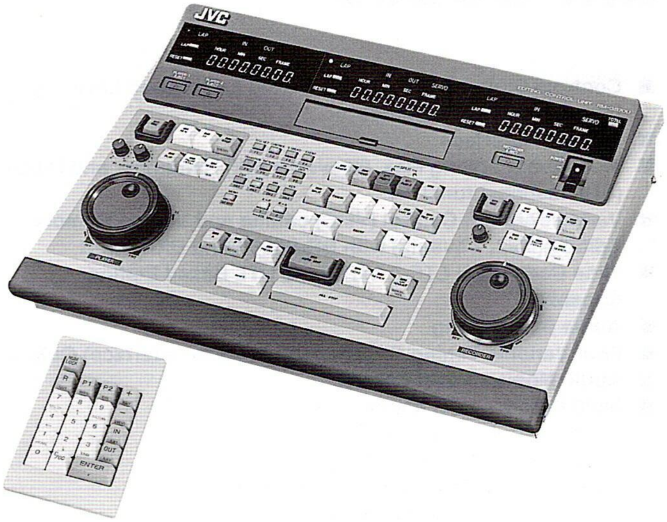
SA-K80U
10 Numerical/Function Keypad

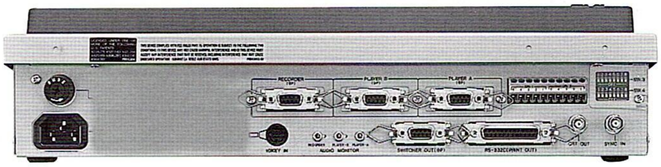
NUM LOCK
R
P1
P2
+
7
8
9
4
5
6
IN
1
2
3
OUT
0
00
ENTER

A/B Roll Editing Controller

RM-G870E

- **Multi-event editing up to 127 events**
- **RS-422 control A/B roll editing with two feeders**
- **On-screen EDL display**
- **Capability of variable motion control**
- **Independent search/jog dials for players and recorder**
- **Audio split editing**
- **GPI ports and RS-422A switcher interface for connection and control of external equipment**
- **AUX1/AUX2 editing capability**
- **Variable preroll times with selectable capstan bump function**
- **Three 8-digit time counters**
- **Time code editing capability**
- **Audio monitor level adjustment**
- **First Edit function**
- **Preview and review functions**
- **Go-To function (can operate all three VCRs simultaneously)**
- **Edit point trim and cancel**
- **Comprehensive on-screen menu**
- **ALL STOP button**
- **Memory backup for editing data**
- **RS-232C printer interface**





Power requirement: 220-240 V AC, 50/60 Hz

Power consumption: 24 W

Weight: 4.8 kg

Dimensions: 430 (W) × 99 (H) × 311 (D) mm

Operating temperature: 0°C to 40°C

Storage temperature: –20°C to 60°C

VTR control functions: PLAY, FF, REW, STOP, PAUSE/STILL, SHUTTLE SEARCH, REC EE, JOG, EJECT, REC

Editing control functions: Edit modes: Assemble and insert

Reference signals: EBU time code or CTL pulse

Capstan bump: ON/OFF

Editing accuracy:
Timecode-referenced in capstan bump mode: ±0 frame (depending on VTR)
CTL-referenced in capstan bump mode: ±2 frames (depending on VTR)

Memory capacity: 127 events

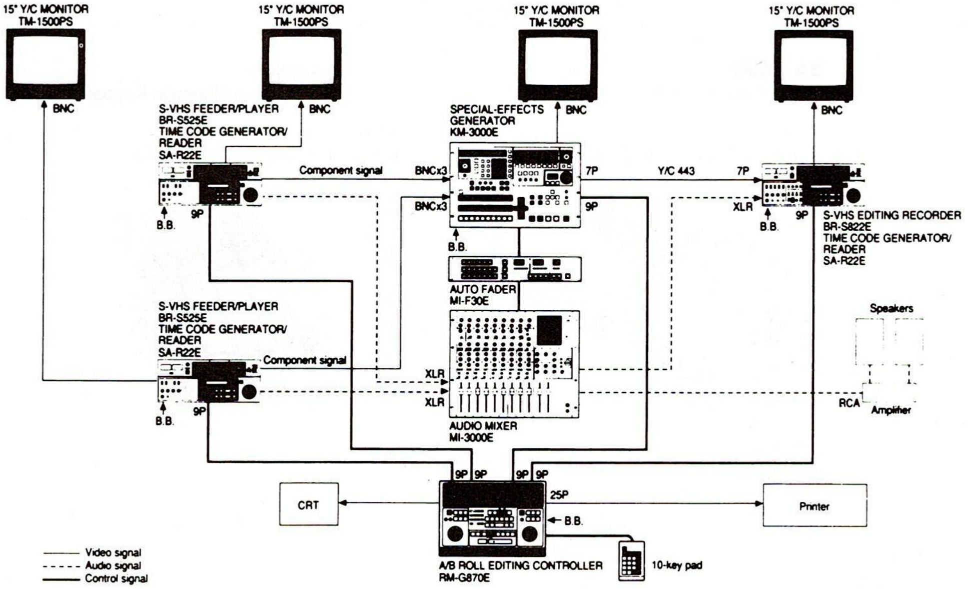
VTR interface: 9-pin (RS-422A)

Number of VTR's controllable: 2 players and 1 recorder

Time counter:
Counter reading display: Up to 23 hours, 59 minutes, 59 seconds, 24 frames (TC/CTL 24-hour display) from -9 hours to 9 hours, 59 minutes, 59 seconds, 24 frames (CTL 10-hour display)
Total programme time display: Maximum 11 hours, 59 minutes, 59 seconds, 24 frames

Standard accessories: SA-K80U 10-key pad × 1, Audio monitor cable × 3

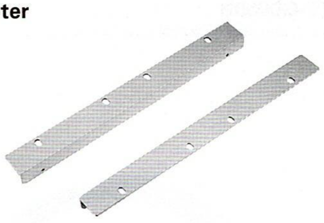
VMC-Capable Professional S A/B Roll Multi-Event Editing System


15" Y/C MONITOR TM-1500PS
15" Y/C MONITOR TM-1500PS
15" Y/C MONITOR TM-1500PS
15" Y/C MONITOR TM-1500PS
BNC
BNC
BNC
BNC
S-VHS FEEDER/PLAYER BR-S525E TIME CODE GENERATOR/ READER SA-R22E
SPECIAL-EFFECTS GENERATOR KM-3000E
Component signal
BNCx3
BNCx3
7P
Y/C 443
7P
9P
XLR
B.B.
9P
S-VHS EDITING RECORDER BR-S822E TIME CODE GENERATOR/ READER SA-R22E
B.B.
9P
B.B.
AUTO FADER MI-F30E
S-VHS FEEDER/PLAYER BR-S525E TIME CODE GENERATOR/ READER SA-R22E
Component signal
Speakers
XLR
XLR
RCA
Amplifier
B.B.
9P
AUDIO MIXER MI-3000E
9P 9P
9P 9P
CRT
25P
Printer
B.B.
A/B ROLL EDITING CONTROLLER RM-G870E
10-key pad
Video signal
Audio signal
Control signal

All model numbers, specifications and prices are subject to change without notice.

Optional Accessories

SA-K66U
Rack Mount
Adapter



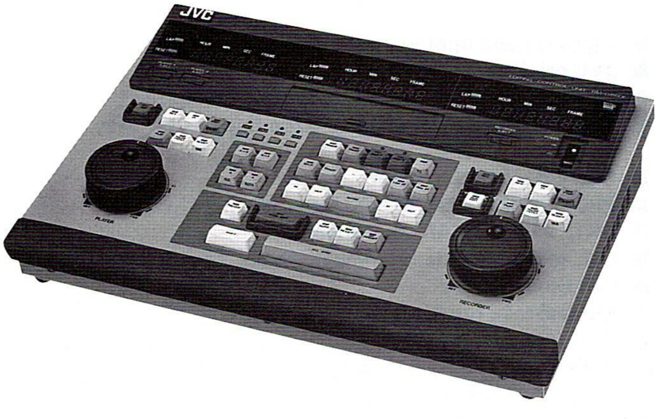
VC-G9050U
9-pin Remote Control Cable (5 m)

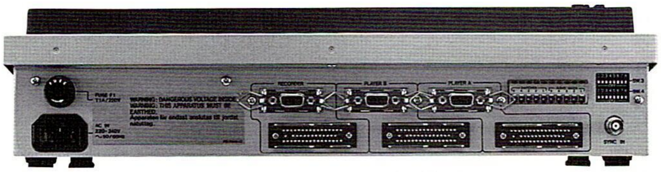
A/B Roll Editing Controller

RM-G860E

- **A/B roll editing with two feeders**
- **Independent search/jog dials for players and recorder**
- **Serial RS-422A and parallel 45-pin remote control interfaces**
- **Time-code-reference editing**
- **Three 8-digit time counters**
- **Time counter and last-edit memory**
- **Two GPI ports for control of external equipment**
- **Variable pre-roll times (3, 5, 7, and 10* seconds) with selectable capstan bump function**
- **Preview function**
- **Review function with selectable out-point-only capability (cut editing only)**
- **Go-To function (can operate all three VCRs simultaneously**
- **Edit point trim and cancel**
- **Auto and Run Edit modes**
  AUX mode for independent recorder operation when editing from and external source
- **ALL STOP button**
- **Can be installed in a standard 19" rack**

* Requires DIP switch resetting.





Power: AC 220 – 240 V ~ 50/60 Hz

Power consumption: 24 W

Weight: 4.8 kg.

Dimensions: 430 (W) × 99 (H) × 311 (D) mm

Operating temperature: 0°C to 40°C

Storage temperature: –20°C to 60°C

Connectors:
AC IN: 3-lead
SYNC: BNC
Composite sync 0.2 to 5.0 Vp-p
Composite video 0.5 to 2.0 Vp-p, 75 ohms, negative sync, unbalanced
Video switcher: harmonica connector
Audio mixer: harmonica connector
VTR interface: RS-422A (9-pin) or 45-pin (parallel)

VTR control functions: PLAY, FF, REW, STOP, PAUSE/STILL, SHUTTLE, SEARCH, REC EE, JOG, EJECT, REC, EDIT (recorder side only)

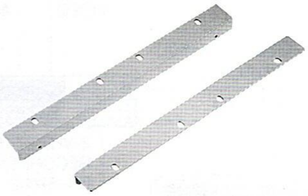
Applicable VTRS:
As players
KR-M840E/KR-M820E/
KR-M800E/KR-M545E/ } Direct
KR-M540E/PR-M900E/
PR-600E
BR-S811/BR-S611E/ } Direct or via
BR-S810E/BR-S610E } SA-F911E
As recorders
KR-M840E/KR-M820E/ } Direct
KR-M800E/PR-900E
BR-S811E/BR-S810E Direct or via SA-F911E

Editing control functions
Edit modes: Assemble and Insert
Ref. signals: EBU time code or CTL pulse
Capstan bump: ON/OFF
Editing accuracy: Timecode-referenced in capstan bump mode: ± 0 frame (depending on VTR)
CTL-referenced in capstan bump mode: ± 2 frames (depending on VTR)

Time counter: Counter reading display: up to 23 hours, 59 minutes, 59 seconds. 24 frames (TC/CTL 24-hour display) from –9 hours to 9 hours, 59 minutes, 59 seconds, 24 frames (CTL 10-hour display)
Total programme time display: Maximum 11 hours, 59 minutes, 59 seconds, 24 frames

Optional Accessories

SA-K66U
Rack Mount Adapter



VC-G7050U
45-pin Remote Control Cable (5m)

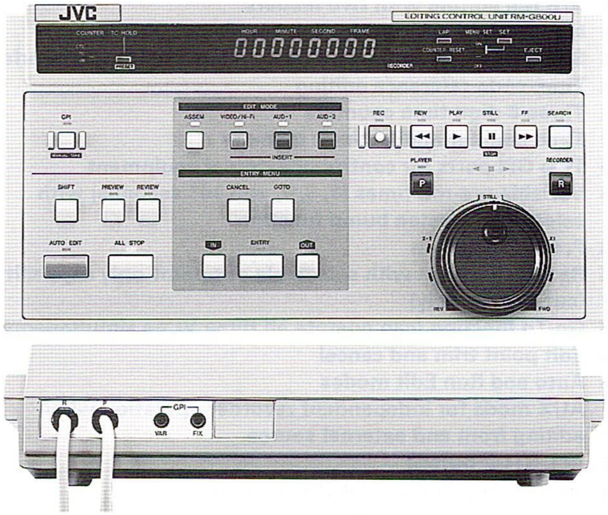
VC-G9050U
9-pin Remote Control Cable (5 m)

Cuts Editing Controller

RM-G800U

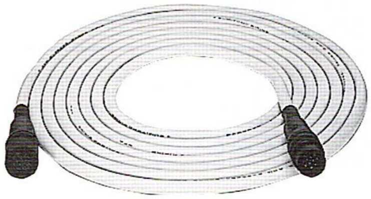
- Compact and light weight editing control unit
- JVC original control bus interface
- Two GPI ports for control of external equipment
- One JOG/SHUTTLE dial and large buttons for easy operation
- One 8-digit LED counter
- PREVIEW/REVIEW/GO-TO function
- ENTRY POINT CANCEL capability
- CTL and time code reference editing
- Lap time counter
- Manual take function

Note: The following functions are not available when using the RM-G800U in combination with the SR-S388E: timecode editing, Audio-2 insert editing, capstan bump functions, and preview editing.


JVC
EDITING CONTROL UNIT RM-G800U
00000000

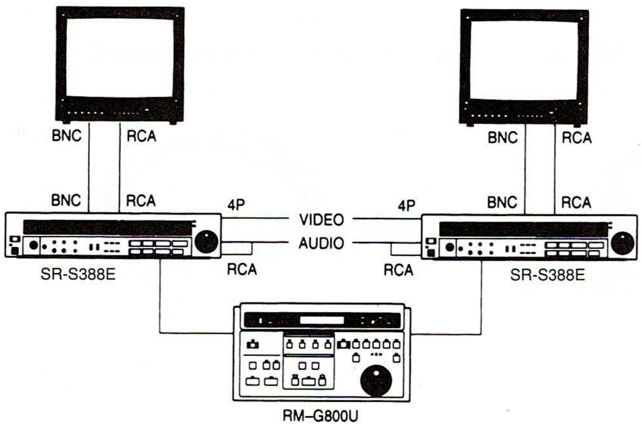
GENERAL
Power requirement: DC 12 V supplied from VTR
Dimensions: 330 (W) × 79 (H) × 182 (D) mm
Weight: 1.2 kg
Operating temperature: +5°C + 50°C (41°F ~ 104°F)
Storage temperature: –20°C ~ + 60°C (–4°F ~ 140°F)
Operating humidity: 30% to 80%
Storage humidity: 10% to 90%
Counter display: 8-digit (LED)
VCR control: PLAY, REC (Recorder only), STOP, REW, FF, JOG, PAUSE/ STILL, COUNTER RESET, EJECT
Editing modes: ASSEMBLY, VIDEO INSERT, AUDIO INSERT, GO TO, REVIEW, SHIFT

Optional Accessories

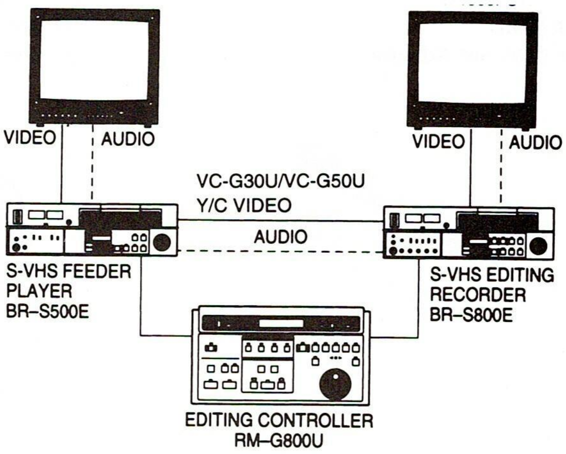


**VC-G8030U (12-pin - 12-pin) (3 m)
Extention Cable**

Cuts-only Editing


BNC
RCA
BNC
RCA
4P
VIDEO
AUDIO
4P
BNC
RCA
BNC
RCA
SR-S388E
RCA
RCA
SR-S388E
RM–G800U

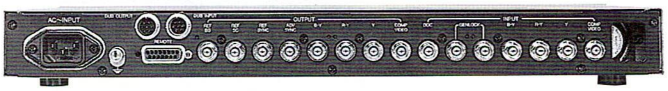
Cuts-only Editing


VIDEO
AUDIO
VC-G30U/VC-G50U
Y/C VIDEO
AUDIO
VIDEO
AUDIO
S-VHS FEEDER PLAYER BR–S500E
S-VHS EDITING RECORDER BR–S800E
EDITING CONTROLLER RM–G800U

Frame Synchroniser/Signal Converter

KM-F250E

INPUT SELECT
OPERATE/BY-PASS
FREEZE
LOCAL
VIDEO LEVEL
KM-F250 FRAME SYNCHRONIZER
GENLOCK
POWER



REMOTE
GENLOCK
INPUT SELECT
VIDEO
LEVEL
CHROMA
HUE
SET UP
OPERATE/BY-PASS
NEGA/POSI
FREEZE
FRAME
FIELD

- **Multi-signal standard transcoder function**
- **Full-frame time base correction**
- **Conforms to CCIR Recommendation 601**
- **Built-in dropout compensator (DOC) circuit**
- **Field freeze and frame freeze functions**

RM-P250E

REMOTE CONTROL UNIT

Designed to be used exclusively with the KM-F250E, the RM-P250E not only controls the KM-F250E's built-in frunctions froma distance, but also adds two special-effects functions, strobe and Negative/Positve reversal.

Input Signals

Composite video (VBS): 1 Vp-p, 75 ohms

Separate Y/C: 1) Y/C 443 (S-VHS)
Y: 0.7V/0.3V (sync), 75 ohms
C (4.43 MHz): 0.3 Vp-p (burst), 75 ohms
2) Y-924 (U-VCR)
Y: 0.35V/0.15V (sync), 75 ohms
C (VBS): 1 Vp-p, 75 ohms
3) Y/C 627 (VHS)
Y: 0.35V/0.15V (sync), 75 ohms
C (VBS): 1 Vp-p, 75 ohms
(* one of either 1), 2) or 3) signal is available by inner select pin)

Component: Y: 1.0 Vp-p, 75 ohms (with sync signal)
R-Y : 0.7 Vp-p, 75 ohms (100% colour bars)
0.525 Vp-p (75% colour bars)
B-Y : 0.7 Vp-p, 75 ohms (100% colour bars)
0.525 Vp-p (75% colour bars)

Reference sync.: Black burst (B.B.) 0.45 Vp-p or PAL-B composite video 1 Vp-p, 75 ohms Loop-through output

DOC: RF carrier 3 to 10 MHz, 0.2 to 1 Vp-p, 75 ohms

Output Signals

Separate Y/C: 1) Y/C 443 (S-VHS)
Y: 0.7V0.3V (sync), 75 ohms
C (4.43 MHz): 0.3 Vp-p, (burst), 75 ohms
2) Y-924 (U-VCR) (HIGH BAND/SP)
Y: 0.35V/0.15V (sync), 75 ohms
C (924 kHz): 0.5 Vp-p, 75 ohms
3) Y/C 627 (VHS)
Y: 0.35V/0.15V (sync), 75 ohms
C (627 kHz): 0.5 Vp-p, 75 ohms
(* one of either 1), 2) or 3) signal is available by SELECT switch)

Component: Y : 1.0 Vp-p, 75 ohms (with sync signal)
R-Y : 0.7 Vp-p, 75 ohms (100% colour bars)
B-Y : 0.7 Vp-p, 75 ohms (100% colour bars)
ADV SYNC: 4 Vp-p, 75 ohms
REF SYNC: 4 Vp-p, 75 ohms
REF SC: 1 Vp-p, 75 ohms
REF BB: 0.45 Vp-p, 75 ohms

Quantization: 13.5 MHz, 8-bit (Conforms to the CCIR REC. 601)

TBC Range: 625H

S/N: 57 dB

Residual Jitter (no external reference sync):
Composite video: ± 15 nsec.
Y/C separate: Luminance ± 15 nsec.
Chrominance ± 2°

K Factor (2T Pulse)
Composite video: 3%
Component: 1%
Separate Y/C signal: 1%
Frequency Characteristics:
Composite video: 3.2 MHz, within $^{+0.5}_{-3}$ dB
(excluding chroma trap influence)
Component: Y: 5.2 MHz, within $^{+0.5}_{-3}$dB
R-Y/B-Y: 2.2 MHz, within $^{+0.5}_{-3}$dB
Y/C separate: Y = 5.2 MHz, within $^{+0.5}_{-3}$dB
(excluding chroma trap influence)
C = 1.3 kHz, within –3 dB
Power Supply: 100–240V AC, 60 Hz
Power Consumption: 40 W
Ambient Temperature: 50 to 40°C
Weight: 6.9 kg
Accessories: Power cord
75-ohm termination plug
Y/C cable

RM-P250E

Power: 12 V/DC (supplied from KM-F250)

Current consumption: 80 mA

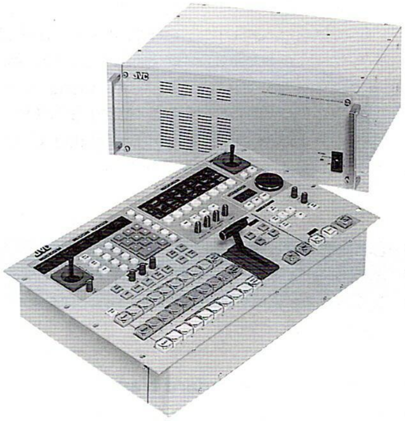
Weight: 900 g

Accessory: Connection cable 15 m

Component Special-Effects Generator

KM-3000E

- Component processing
- 8-Input component mixer, inputs 6, 7 and 8 also accept RGB signals
- Outputs in three different signal formats (component, composite and Y/C signal)
- Soft chroma key, external key and luminance key also possible
- Auto and manual transition: Special effects, downstream keys and fades can be operated either automatically or manually
- The transition time in the auto mode can be set 0 to 999 frames with rotary dial or 10-digit key pad
- Colour matte generation for border, background colour and downstream key
- Built-in data memory (up to 16 events and 24 colours)
- 3-Mode composite effects can be mixed by leaving both one extra effect
- Interfaces with most VCR editing controllers (RS-422 & GPI)
- 23 Different wipe patterns



Video Inputs
  Programme × 8 Y: 1.0 Vp-p, 75 ohms
  R-Y/B-Y: 0.7 Vp-p (100% colour bar). 75 ohms
  R-Y/B-Y: 0.525 Vp-p (75% colour bar with 75% setup). 75 ohms
  Key × 2 VB: 0.7 Vp-p. 75 ohms
  Ext key × VB: 0.7 Vp-p. 75 ohms or High
  Ext wipe × 1 VB: 0.7 Vp-p. 75 ohms or High

Video output
  Programme
    Component × 2 Y: 1.0 Vp-p. 75 ohms
    R-Y/B-Y: 0.7 Vp-p (100% colour bar). 75 ohms
    0.525 Vp-p (75% colour bar with 7.5% setup). 75 ohms
    Composite × 1 VBS: 1.0 Vp-p. 75 ohms
    Y/C output × 1 Y: 1.0 Vp-p. 75 ohms
    C: 0.3 Vp-p. 75 ohms (burst level)
  Preview
    Component × 1 Y: 1.0 Vp-p. 75 ohms
    R-Y/B-Y: 0.7 Vp-p (100% colour bar). 75 ohms
    0.525 Vp-p (75% colour bar with 7.5% setup).
    75 ohms
    Composite × 1 VBS: 1.0 Vp-p. 75 ohms
    Key hole × 1 VB: 0.7 Vp-p. 75 ohms

Gen lock input
  B.B. × 1 VBS: 0.45 Vp-p. 75 W or High

Sync output
  B.B. × 3 VBS: 0.45 Vp-p. 75 Ω

Fader output: Fader DC voltage × 1 0–5 V DC

Wipe patterns: 23 patterns

Frequency response: 60–5.5 MHz/±0.3 dB

Delay difference: ±25 nS between each channel

Signal to noise ratio: More than 60 dB

Cut: Cut 8 inputs

Mix (dissolve): Manual fader or auto

Wipe: Head, soft, border, softborder

Positioner Wipe: centering function provided

Chroma Key: Hue, clip, gain adjustable

Luminance Key: Clip, gain adjustable

Colour matte generalor:
  Back colour, boder colour, DSK colour, hue, sat lum adjustable

Colour bar generator: EBU Colour bar, black or colour bar switchable

DSK input: Input 1–8 selectable

DSK mask: Use wipe patterns for DSK mask

DSK preview: DSK preview push switch provided

Variable duration time: EFE, DSK, fade (0-999 frames)

Spot light: Use wipe patterns for spot light

Key Mask: Use wipe patterns for key mask

Effects Preview: Key preview and back ground preview possible

Event memory: Up to 16 events memory provided

Data entry key:
  Use ten key pad for data entry (hue, sat, lum, duration, wipe width, event no.)

Rotary dial: Change duration time (0-999 frames) EFE, DSK, Fade

Editor interface: RS-422 serial interface equipped

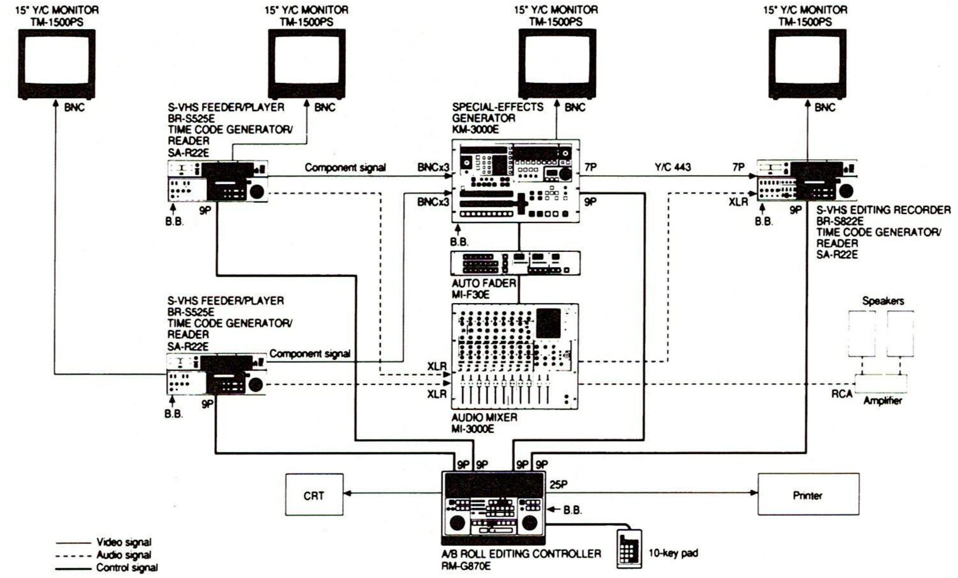
GPI interface: EFE, DSK, fade

Power consumption:
  220 V-240 V AC. 50/60 Hz 95 W (main unit).
  28 W (control unit)

Dimensions
  Control unit: 482 (W) x 150.5 (H) x 310 (D). (unit: mm)
  Main unit: 482 (W) x 180.5 (H) x 410 (D). (unit: mm)

Weight: Control unit: 6.5 kg
  Main unit: 14.5 kg

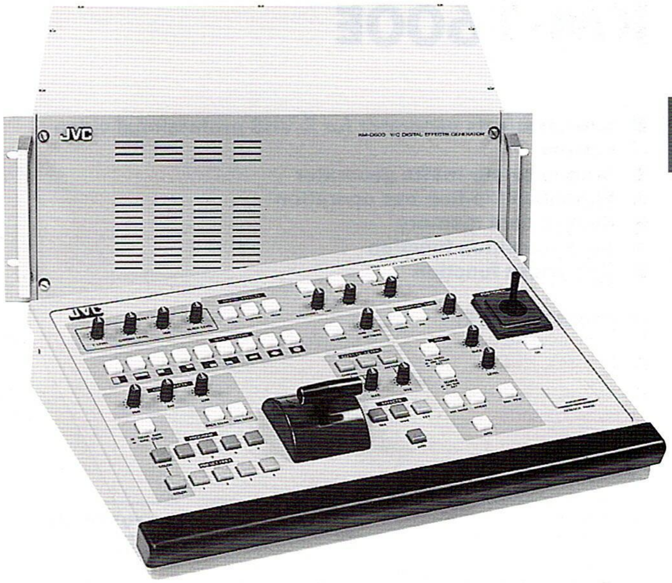
VMC-Capable Professional S A/B Roll Multi-Event Editing System


15" Y/C MONITOR
TM-1500PS
15" Y/C MONITOR
TM-1500PS
15" Y/C MONITOR
TM-1500PS
15" Y/C MONITOR
TM-1500PS
BNC
BNC
BNC
BNC
S-VHS FEEDER/PLAYER
BR-S525E
TIME CODE GENERATOR/
READER
SA-R22E
SPECIAL-EFFECTS
GENERATOR
KM-3000E
Component signal
BNCx3
BNCx3
7P
Y/C 443
7P
9P
XLR
9P
B.B.
9P
B.B.
B.B.
S-VHS EDITING RECORDER
BR-S822E
TIME CODE GENERATOR/
READER
SA-R22E
AUTO FADER
MI-F30E
S-VHS FEEDER/PLAYER
BR-S525E
TIME CODE GENERATOR/
READER
SA-R22E
Component signal
Speakers
XLR
XLR
RCA
Amplifier
B.B.
9P
AUDIO MIXER
MI-3000E
9P
9P
9P
9P
25P
CRT
Printer
B.B.
Video signal
Audio signal
Control signal
A/B ROLL EDITING CONTROLLER
RM-G870E
10-key pad

Y/C Digital Effects Generator

KM-D600E

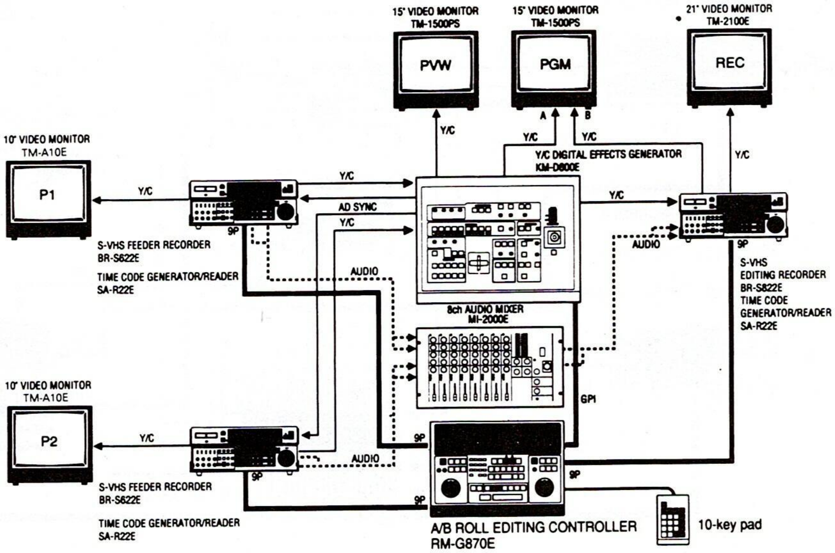
- Digital effects (freeze, strobe, mosaic, slide, paint, negative and compression) with built-in dual channel TBC
- Y/C 443 and composite signals can be input
- Y; 8-bit, C: 8-bit 4:1:1 component process
- DOC and ADVANCED SYNC for VTR
- Built-in full-field colour bar generator
- Auto and manual transition
- Soft Wipe/Positioner wipe
- GPI control for connection with VTR controller
- Built-in RGB chroma key
- Built-in colour matte generator
- Fill video input terminal for DSK
- DSK masking function
- Y, C and black levels and hue can be preset



INPUT SIGNALS	
Video inputs:	Y/C 443: 4 inputs, Y: 1.0 Vp-p (with Sync) 0.3 Vp-p (Burst level), 75 ohms (7-pin x 4) VBS: 4 inputs, 1.0 Vp-p, 75 ohms (BNC x 4)
Genlock inputs:	BB: 0.45 Vp-p, 75 ohms or high impedance (BNC x 2)
Chroma key inputs	RGB: 0.7 Vp-p, 75 ohms (BNC x 3)
DSK key input	VS or VBS: 0.7/1.0 Vp-p, 75 ohms (BNC x 1)
DSK fill inputs	RGB: 0.7 Vp-p, 75 ohms (BNC x 3)
DOC	0.2–1.0 Vp-p, 75 ohms (BNC x 2)
GPI	Dry contact (Terminal)
OUTPUT SIGNALS	
Programme outputs	Y/C 443: 2 outputs, Y; 1.0 Vp-p (with Sync) C: 0.3 Vp-p, (Burst level), 75 ohms (7-pin x 2)
Preview output	Y/C 443: Y: 1.0 Vp-p, (with Sync) C: 0.3 Vp-p (Burst level), 75 ohms (7-pin x 1)
Programme VBS output	1.0 Vp-p, 75 ohms (BNC x 1)
Preview VBS output	1.0 Vp-p, 75 ohms (BNC x 1)
Tally output	+5V or dry contact (Terminal)

SYNC OUTPUT SIGNALS	
BB	0.45 Vp-p, 75 ohms (BNC x 2)
HD	4.0 Vp-p, 75 ohms (BNC x 1)
VD	4.0 Vp-p, 75 ohms (BNC x 1)
REF sync	4.0 Vp-p, 75 ohms (BNC x 1)
ADV sync	4.0 Vp-p, 75 ohms (BNC x 2)
PERFORMANCE	
Frequency response	60 Hz – 5.0 MHz (+0.5 dB, –3 dB)
S/N ratio	More than 55 dB (P-P/RMS)
Y/C timing	Less than 50 nsec.
Power consumption	Main unit 70 W Control unit 12 W
Power supply	220/240 V AC, 50/60 Hz
Ambient temperature range	5°C – 40°C (40°F – 104°F)

A/B Roll Editing System


15" VIDEO MONITOR
TM-1500PS
PVW
15" VIDEO MONITOR
TM-1500PS
PGM
21" VIDEO MONITOR
TM-2100E
REC
A
B
Y/C
Y/C
Y/C
Y/C
Y/C DIGITAL EFFECTS GENERATOR
KM-D600E
10" VIDEO MONITOR
TM-A10E
P1
Y/C
Y/C
AD SYNC
Y/C
Y/C
AUDIO
9P
S-VHS FEEDER RECORDER
BR-S622E
TIME CODE GENERATOR/READER
SA-R22E
AUDIO
9P
S-VHS
EDITING RECORDER
BR-S822E
TIME CODE
GENERATOR/READER
SA-R22E
8ch AUDIO MIXER
MI-2000E
GPI
10" VIDEO MONITOR
TM-A10E
P2
Y/C
AUDIO
9P
9P
9P
9P
S-VHS FEEDER RECORDER
BR-S622E
TIME CODE GENERATOR/READER
SA-R22E
A/B ROLL EDITING CONTROLLER
RM-G870E
10-key pad

Y/C Special Effects Generator

KM-1600E

- Special effects generator for S-VHS professional video system
- Built-in colour matte generator
- Simplified flip-flop bus operation
- Built-in data memory
- Auto transition function
- Soft wipes function

(Without CE mark)

INPUT SIGNALS

Video Inputs: Y/C 443:4 inputs,
Y=1.0 Vp-p (with Sync)
C=0.3 Vp-p (Burst level), 75 ohms (7P)

Genlock Inputs: BB: 0.45 Vp-p, 75 ohms or high impedance (BNC)

Chroma Key inputs: RGB 0.7 Vp-p, 75 ohms (BNC)

DSK Key Input: VS or VBS 0.7/1.0 Vp-p, 75 ohms (BNC)

DSK R/G/B Input: RGB 0.7 Vp-p, 75 ohms (BNC)

GPI: Dry contact (Terminal)

OUTPUT SIGNALS

Programme Outputs: Y/C-443: 2 outputs,
Y=1.0 Vp-p (with Sync)
C=0.3 Vp-p (Burst level), 75 ohms (7P)
Y/C 924: 1 output, Y=1.0 Vp-p (with Sync)
C=0.3 Vp-p (Burst level), 75 ohms (7P)
(Switchable between Y/C 443 and Y/C924)

Preview Output: Y/C 443: Y=1.0 Vp-p (with Sync)
C=0.3 Vp-p (Burst level), 75 ohms (7P)

Program Output (VBS): 1.0 Vp-p, 75 ohms (BNC)

Tally Output: +5 V or dry contact (Terminal)

SYNC OUTPUT SIGNALS

BB (Black Burst (1, 2): 0.43 Vp-p, 75 ohms (BNC)

HD: 4.0 Vp-p, 75 ohms (BNC)

VD: 4.0 Vp-p, 75 ohms (BNC)

SYNC: 4.0 Vp-p, 75 ohms (BNC)

PERFORMANCE

Frequency Response: 60Hz to 5.0MHz ±0.5 dB, 5.0 MHz to 8.0 MHz +0.5 dB, –3 dB

S/N: More than 60 dB (P-P/RMS)

Y/C Timing: Less than 50 nsec.

Power Supply: 220/240 V AC, 50/60 Hz

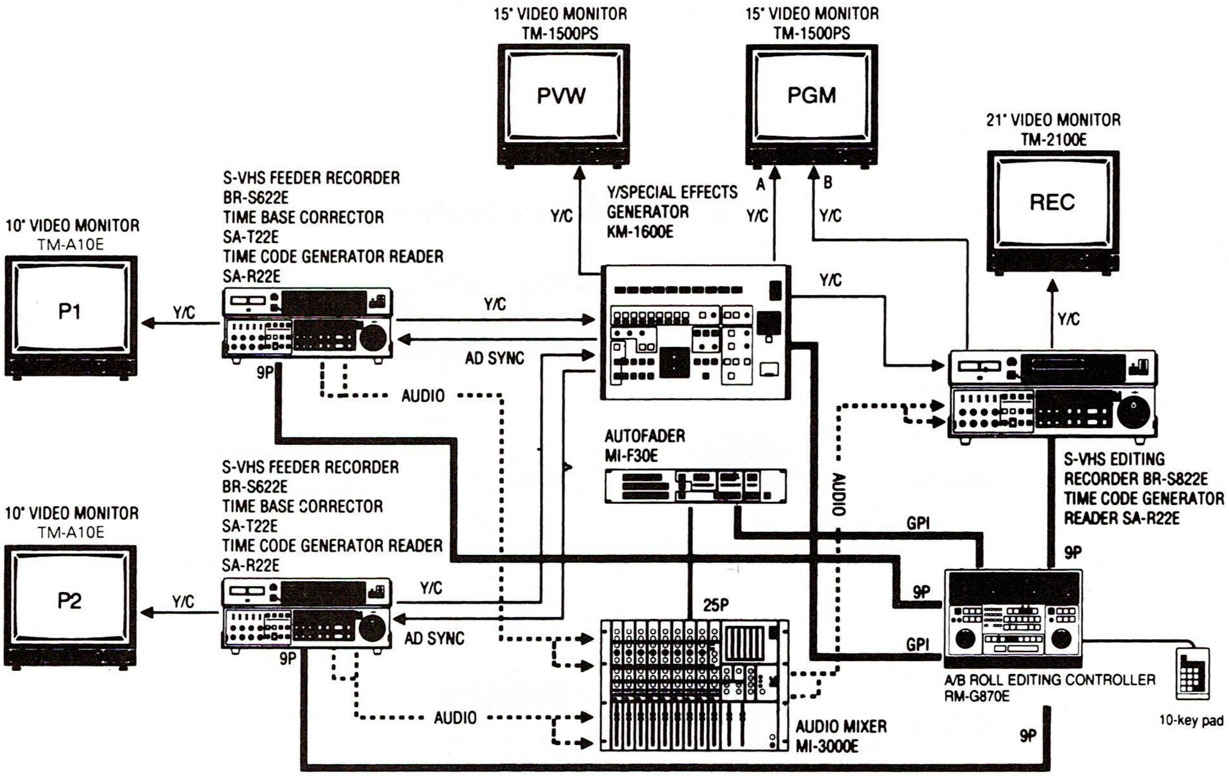
Power Consumption: 50 W

Operating Temperature: 5°C to 40°C

Dimensions: 482 (W) x 320 (H) x 180 (D) mm

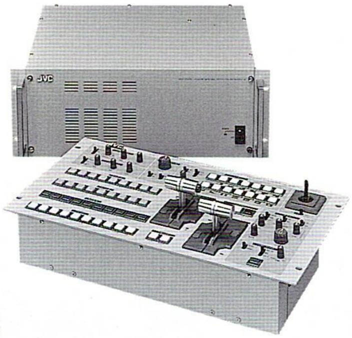
Weight: 9.5 kg

A/B Roll Editing System


15" VIDEO MONITOR
TM-1500PS
PVW
15" VIDEO MONITOR
TM-1500PS
PGM
21" VIDEO MONITOR
TM-2100E
REC
10" VIDEO MONITOR
TM-A10E
P1
S-VHS FEEDER RECORDER
BR-S622E
TIME BASE CORRECTOR
SA-T22E
TIME CODE GENERATOR READER
SA-R22E
Y/C
Y/SPECIAL EFFECTS
GENERATOR
KM-1600E
A
B
Y/C
Y/C
Y/C
Y/C
AD SYNC
9P
AUDIO
AUTOFADER
MI-F30E
AUDIO
S-VHS EDITING
RECORDER BR-S822E
TIME CODE GENERATOR
READER SA-R22E
GPI
9P
10" VIDEO MONITOR
TM-A10E
P2
S-VHS FEEDER RECORDER
BR-S622E
TIME BASE CORRECTOR
SA-T22E
TIME CODE GENERATOR READER
SA-R22E
Y/C
Y/C
25P
9P
AD SYNC
9P
GPI
A/B ROLL EDITING CONTROLLER
RM-G870E
10-key pad
AUDIO
AUDIO MIXER
MI-3000E
9P

Composite Special Effects Generators

KM-2500E

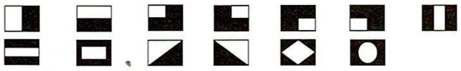


- **2 M/E Bus**
- **Multi-input, multi-function**
  Eight inputs, four buses and two fader levers for a wide range of effects
- **Wipe pattern selection**
- **13 Wipe patterns with soft wipe, border wipe, and positioner (round, diamond and window) functions, for effective wipes**
- **Chroma key generator**
- **Auto transition function**
- **Flip-flop mix circuit**
- **Colour back ground generator**
- **DSK (Down stream keyer)**
- **Non-locked signal input (AUX)**
- **SSG with genlock function**

(Without CE mark)

KM-1200E

- **1 M/E Bus**
- **A flip-flop auto-take circuit is built in**
- **Colour back ground generator**
- **Downstream keyer (DSK)**
- **Chroma key generator**
- **6 built-in wipe patterns**
- **AC/DC compatibility**

MODE	KM-2500E	KM-1200E
Video inputs:	8 composite video signals 1 Vp-p, 75 ohms or high (BNC)	4 composite video signals, 1 Vp-p (75 Ω or high switch provided.)
AUX input:	1 composite video signal (non-synchronous 1 Vp-p, 75 ohms or high) (BNC)	
Chroma key inputs:	R/G/B non-composite video signal 0.7 Vp-p, 75 ohms or high) (BNC)	R/G/B non-composite or composite video signal, 1 Vp-p (with SYNC) or 0.7 Vp-p (without SYNC)
External key input:	1 composite or non-composite video signal 1/0.7 Vp-p, 75 ohms or high (BNC)	1 composite or non-composite video signal, 1 Vp-p (with SYNC) or 0.7 Vp-p (without SYNC), (Chroma key and EXT key operations cannot be performed simultaneously.)
DSK key input (Downstream key):	1 composite video signal 1 Vp-p, 75 ohms or high (BNC)	
DSK video input:	1 composite video signal 1 Vp-p, 75 ohms or high (BNC)	1 composite or non-composite video signal, 1 Vp-p (with SYNC) or 0.7 Vp-p (without SYNC)
B/W superimpose input:	1 composite video signal 1 Vp-p, 75 ohms or high (BNC)	
Programme output:	3 composite video signals 1 Vp-p, 75 ohms (BNC)	2 composite video signal 1 Vp-p, 75 ohms (BNC)
Preview output:	1 composite video signal 1 Vp-p, 75 ohms (BNC)	
Frequency response:	60 Hz to 5 MHz ± 0.3 dB	60 Hz to 5 MHz ±0.3 dB, 5 MHz, ± 0.3/–2 dB
DG:	Less than 1.5% at 10 to 90% APL	Less than 2%
DP:	Less than 2°	Less than 2°
S/N:	More than 60 dB (p-p/rms)	More than 60 dB (p-p/rms)
Sync output:	HD, VD, composite SYNC for external synchronization of B/W camera. 4 Vp-p, 75 ohms (BNC)	HD, VD and SYNC, BL 4 Vp-p, 75 ohms (BNC) Black burst BB1/BB2/BB3 0.45 Vp-p, 75 ohms (BNC)
SYNC PULSE output:	SYNC, BL, HD, VD, BFP, PAL-P4 Vp-p and SC 1 Vp-p for external synchronization, 75 ohms (BNC) (* These pulses are not available in EXT PULSE DRIVE mode)	
BB (BLACK BURST) output:	Black burst signals 0.45 Vp-p, 75 ohms (Two outputs) for camera genlocking (BNC)	Black burst signals 0.45 Vp-p, 75 ohms (Two outputs) for camera genlocking (BNC)
Synchronization system:	1. Internal mode 2. External mode – Genlocked by composite video or black burst signal 3. Pulse drive mode – External SYNC, BL, HD, VD, BFP, SC, PAL-P	2 modes, INT/EXT GENLOCK (with external VBS or BB) External genlock mode SC phase: COARSE (0°, 120° and 240° steps). FINE (±60° continuously variable)
Subcarrier:	Phase: Adjustable from 0° to 360° Coarse: In steps (0°, 120°, 240°) Fine: Continuously variable between steps	
Horizontal phase accuracy:	± 0.1 microseconds (with reference to the input synchronization signal)	
Wipe patterns:		Chroma keying: RGB chroma key (blue-background), slice circuit and delay circuit provided 6 wipe patterns
Positioner:	Effective to	
Tally:	5V DC (10 mA max.)	Voltage supply of 5 V DC (10 mA max.)
Ambient temperature range:	0°C to 40°C	
Power consumption:	AC 220/240 V, 50/60 Hz, 70 W (with control unit)	AC 220/240 V, 50 Hz, or DC 12 V AC 18 W, DC 1.2A (12V)
Dimensions & weight:	1. Main unit Standard EIA rack size (4 unit size) 12.5 kg 2. Control unit Standard EIA rack size (6 unit size) 5.0 kg	482 (W) x 177 (H) x 100 (D) mm 4.2 kg

10-Channel Audio Mixer

MI-3000E

- **8 Monaural channels plus a set of stereo channels**
- **Built-in VCA (Voltage-Controlled Amplifier) can be controlled by the MI-F30E**
- **EIA rack mountable**
- **3-band equalizer for each channel (low, mid and high)**
- **Trim control (ch 1 to 8)**
- **100 mm scale ultra-smooth fader control)**

Input Signal

Ch-1–8: Monaural, A/B switchable
  A Input: –60/–40/+4 dB, more than 5 k-ohms, balanced (XLR-3-31)
  B Input: (Ch 1–4) + 4 dB, more than 5 k-ohms balanced (XLR-3-31)
    (Ch 5–8): –20 dB, more than 10 k-ohms, unbalanced, (RCA)
  Equalizer: Low: 100 Hz ± 15 dB, shelving
    Mid: 150 Hz-7 kHz ± 15 dB, peaking
    High; 10 kHz ± 15 dB, shelving
  Ch 9: Stereo, line/phono switchable
    Line: –20/+4 dB, 10 k-ohms, unbalanced (RCA)
    Phono: –54 dB, 1 kHz, more than 50 k-ohms, unbalanced (RCA)
  Aux (1, 2): + 4 dB, 10 k-ohms, balanced, (XLR-3-31) or unbalanced, (RCA)
    Ext Ret (L, R): + 4 dB, 10 k-ohms, balanced (XLR-3-31)
  Talk Back Mic: –70 dB, 600 ohms, balanced (XLR-3-31)

Output Signals
  Master (L, R): + 4 dB, 600 ohms, balanced (XLR-3-32)
    + 4 dB, 10 k-ohms, unbalanced (RCA)
  Aux (1/2): + 4 dB, 10 k-ohms, unbalanced (RCA)
  Monitor (L/R): + 4 dB, 10 k-ohms, unbalanced, (RCA)
  Head Phones (L/R): 16–600 ohms, max. 100 mW at 16 ohms (stereo phono jack)
  Aux Meter: Master (L/R): + 4 dB, 10 k-ohms (9-pin, d-sub)
    Monitor (L/R): + 4 dB, 10 k-ohms (9-pin, d-sub)
    Oscillator: 10 k-ohms (9-pin d-sub)

Frequency Response: 20 Hz – 20 kHz + 0/–2 dB

THD: Less than 0.08% (20 Hz–20 kHz at –20 dB output)

Equivalent input noise: Less than –128 dB (weighting according to IHF-A)

Residual noise: Less than –90 dB (weighting according to IHF-A)
  Less than – 75 dB (weighting according to IHF-A)

Cross talk: less than –70 dB (1 kHz)

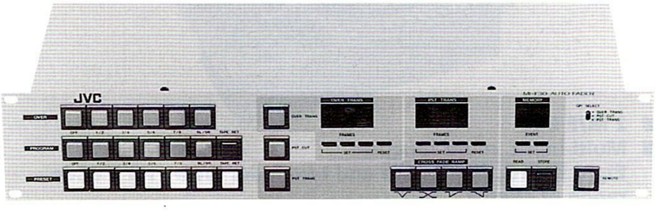
Oscillator: 400 Hz, 7 kHz sine wave

Power supply: 220/240 V AC, 50/60 Hz

Dimensions: 482 (W) x 115 (H) x 399 (D) (unit: mm)

Auto Fader Unit

MI-F30E



- **Enhanced interface flexibility (RS422, RS232C and three GPIs)**
- **Four different transition patterns, with possible transition rates #999 frames (V X V V)**
- **100 event memory**
- **EIA rack mountable**

Cross Point: 3-bus matrix type (over, programme, preset)

Channel control: 2-channel gang operation (1/2, 3/4, 5/6, 7/8, 9L/9R)

Transition rates: 0 –999 frames (over, preset)

Transition pattern: 4 patterns (V Cut, Cross Fade, Cut Fade, Fade-Cut)
V X V V

Event memory: 100 memories (cross point, transition pattern, transition rate)

Serial interface: RS-422 or RS-232C

GPI: 3 modes (over transition, preset transition, preset cut)

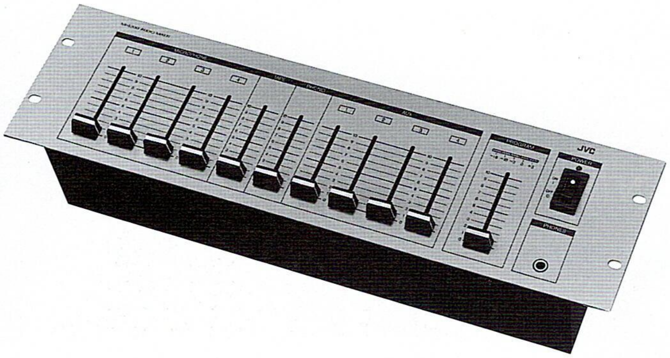
Power supply: 220/240 V AC, 50/60 Hz

Dimensions: 482 (W) x 88 (H) x 180 (D), (unit: mm)

Weight: 5.5 kg

Professional Audio Mixer

MI-1200E



- **10-channel rack-mount audio mixer**
- **Large slide control for easy operation**
- **5-LED level meter display**
- **XLR-type 3-pin microphone connectors**
- **Compatible with both AC and 12 V DC power supplies**
- **Ideal for use in voice systems, in combination with the KM-1200 special effects generator**

Input Signals
  Microphone: × 4, –64 dB, 600 ohms balanced transformer type (XLR-31-3) (Hot: pin 2 for MI-1200E)
  Turntable: × 1, –54 dB, 50 k-ohms unbalanced (RCA type pin × 2) (L/R mixing system)
  Tape recorder: × 1, –10 dB, 50 k-ohms unbalanced (RCA type pin × 2) (L/R mixing system)
  Auxiliary: × 4, –10 dB, 50 k-ohms unbalanced (RCA type pin)

Output Signals
  Programme: × 1, 0 dB/–20 dB switchable, 600 ohms balanced (XLR-32-3)
  Programme (sub): × 1, –10 dB, 10 k-ohms unbalanced (RCA type pin)
  Headphones: × 1, 80 mW max., 8 ohms load (stereo phone jack)

Frequency response: 50 to 15,000 Hz, to 0/–1.5 dB (at 1 kHz)

S/N: More than 60 dB (at 1 kHz)

Residual noise: Less than –70 dB

Distortion: Less than 1% (at 1 kHz, rated output)

Level indicators: 5 LEDs (–15/– 10/– 3/0+3 dB indications)

Ambient temperature: 0°C to 40°C

Power supply: AC 220/240 V, or DC 12V

Power consumption: 5 W (AC), 2.2 VA (DC)

Dimensions:
  Rack mounting: 19" EIA standard rack required panel units 4H
  Unit dimensions: 482 (W) × 132 (H) × 91 (D) mm

Production / General Monitors

Field/Studio

TM-600PN 6″ AC/DC, Internal Battery PAL/NTSC 65
TM-1010PN 10″ AC/DC PAL/NTSC 66

Reference

BM-H1400PN 14″ EBU Phosphor PAL/NTSC 67
BM-H2000PN 20″ EBU Phosphor PAL/NTSC 67
IF-C2000SDE Serial Digital Interface PAL/NTSC 68

Production / General

TM-1700PN 17″ Y/C (4 pin) PAL/NTSC 69
TM-2100PN 21″ Y/C (4 pin) PAL/NTSC 69
TM-A14PN 14″ Y/C (4 pin) PAL/NTSC 70
TM-A10E 10″ Composite PAL 70
TM-140E 14″ Composite PAL 71
TM-2100E 21″ Y/C (7 pin) PAL 71

Black and White Monitors

TM-9043EG 9″ With 4ch switcher and power for up to four TK-S140 cameras 72
TM-923E 9″ 73
TM-123E 14″ 73

Display Monitor

TM-290ZE 29″ Component, Y/C PAL/SECAM/NTSC 76

Flat Panel Plasma Display

GD-V425PZW 42″ 16:9, Computer, component, Y/C PAL/SECAM/NTSC 77

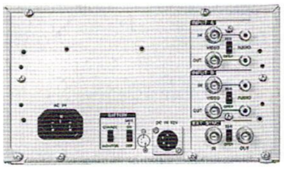
Computer / Video Projectors 78-89

Field/Studio Colour Video Monitor

TM-600PN 6″

PAL/NTSC

- Accepts NTSC and PAL colour picture signals
- Multi-power source operation:
  - 100 ~ 240 V AC
  - Integrated battery pack, slot accepts JVC NB-G1U and NP-1B type batteries
  - 12 V DC input connector for other battery systems
  - Unique built-in battery re-charge capability (NB-G1U, NP-1B)
- Battery save mode detects when no video input is present
- 3U rack mountable
- Heavy-duty metal cabinet
- Earphone jack
- Underscan mode
- Colour off switches
- Built-in speaker
- Battery adapters of Anton Bauer and PAG can be used
- Meets CE regulation



Type:	Colour video monitor
Colour system:	PAL/NTSC
CRT:	90° deflection angle, 0.42 mm pitch
Horizontal resolution:	more than 250 TV lines
Power requirement:	AC: 100-240 V AC, 50/60Hz, auto detection DC: 12V DC
Battery pack:	JVC NB-G1 or NP-1B type
Power consumption:	AC 30 W DC 32 W (2.7A DC12 V)

Audio output:	0.5 W
Speaker:	8 cm round
Input signals:	Input A/B Video input: BNC × 2: Composite video signal: 1.0Vp-p, 75 ohms, sync negative, bridged out
Audio input:	RCA×2: 390 mVrms, high impedance, bridged out
Ext. Sync In:	BNC×2: 1.0-4.0Vp-p, 75 ohms, bridged out possible
Dimensions:	220 (W) × 137 (H) × 340 (D) mm
Weight:	4.9 kg

Provided Accessories

Screen hood

Rear guard

Optional Rack Mount Adapters

(Dual mountable)

RK-603E — 3U type (closed)

- Equipped with fans to ventilate on the rear
- 220 – 240 V AC, 50/60 Hz

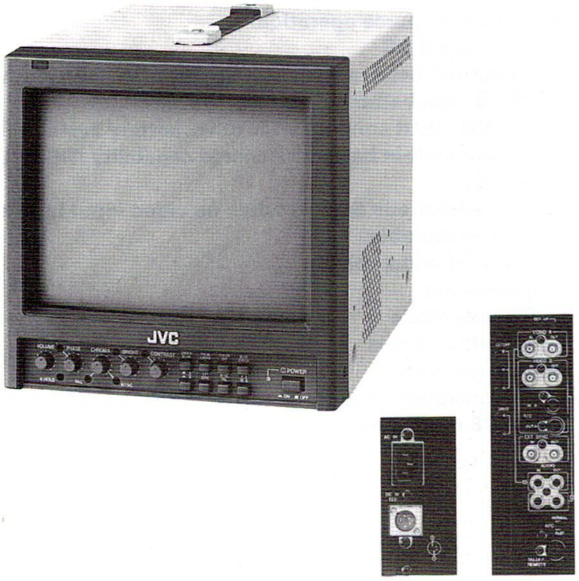
RK-604E — 4U type

Field/Studio Colour Video Monitor

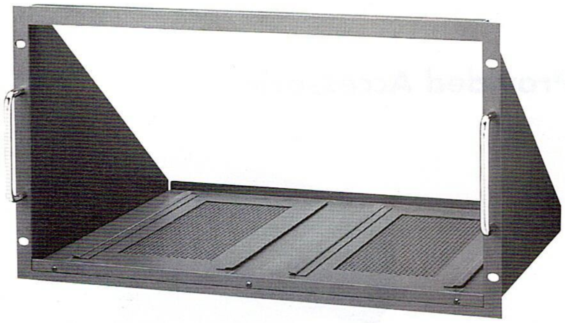
TM-1010PN 10″

PAL/NTSC

- **PAL/NTSC Compatible**
- **16:9 Display Capability**
- **Tally Lamp**
- **Tally/Remote Connector**
- **Rugged Metal Cabinet**
- **Underscan, Pulse Cross, Blue Check, Colour OFF, External Sync**
- **AC Mains or 12 V DC Operation**
- **Dual Mountable in 19" Rack Side by Side**



Type	Colour video monitor
Colour System	PAL/NTSC
CRT	10" (diagonally measured), in-line gun, stripe pitch 0.50 mm
Scanning Frequency	H: 15.625 kHz (PAL)/15.75 kHz (NTSC) V: 50/60 Hz
Rated Power	230 V AC, 50 Hz under CE 12 V DC
Horizontal Resolution	More than 300 TV lines
Power Consumption	0.41 A (AC), 3.3 A (DC12 V)
Colour Temperature	6500°K
Input Terminals	
1) Input A:	
Composite Video	1.0 V (p-p), 75 ohms, negative sync., auto-termination, BNC x 2 bridged output possible
2) Input B:	
Composite Video	1.0 V (p-p), 75 ohms, negative sync., auto-termination, BNC x 2, bridged output possible
Y/C	Y: 1.0 V (p-p), 75 ohms, negative sync. C: 0.3 V (p-p), 75 ohms (PAL) 0.286 V (p-p), 75 ohms (NTSC) Auto-termination, S-4-pin x 2, bridged output possible
3) External Sync:	Composite sync. 1.0 - 4.0 V (p-p) BNC x 2, bridged output possible
Audio Terminals	RCA pin x 4 for input A & B, bridged output possible
Audio Speaker	8 cm round, 1 W output
Power Cord	Continental type (TM-1010PN) UK Mains Lead type (TM-1010PN-K)
Tally/Remote	DIN 8-pin

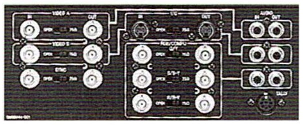


RK-A10E
Rack Mount Adapter for TM-1010PN and TM-A10E

Reference Monitors

BM-H1400PN 14″

Component PAL/NTSC



BM-H2000PN 20″

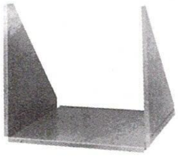
Component PAL/NTSC

- **EBU Phosphor**
- **High Resolution: More than 750 TV horizontal lines**
- **PAL/NTSC/NTSC 4.43 capability (auto)**
- **Multi-format compatibility accepting variety of video inputs:**
  1) Composite video signals (BNC)
  2) Y/C separate video signals (4-pin)
  3) Y/R-Y/B-Y signals (BNC)
  4) RGB analogue signal (BNC)
- **Beamcurrent feedback system for colour balance stability**
- **"Memory Mode" for user preset capability**
- **On-screen menu & control for sub-functions**
  e.g.:
  1) Colour temp. select 9300°K/6500°K
  2) Aspect select 4:3/16:9
  3) Front control lock
- **Wireless remote control (Remote unit is optional RM-C550W)**
  1) With a single wireless remote control adopting

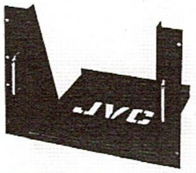
(cont.)
  ID system, users can operate, control and adjust several monitors, either individually or collectively
  2) Functions
  • Picture adjustment (Repeat functions of the ON-SCREEN MENU plus front panel picture controls)
  • Degauss
  • Volume
- **On-screen menu & control for sub-functions**
  e.g.
  - Colour temp. select 9300°K/6500°K
  - Aspect select 4:3/16:9
  - Front control lock
- **Built-in speaker**
- **Mountable in EIA-standard rack with optional adapter (RK-1400E/RK-20E)**
- **Meets CE regulation**

Type:	Colour video monitor
Colour system:	PAL/NTSC/NTSC 4.43
CRT: BM-H2000PN	20" (diagonally measured), trio-dot pitch CRT Phosphor: EBU Dot pitch : 0.4 mm
BM-H1400PN	14" (diagonally measured), trio-dot pitch CRT Phosphor: EBU standard Dot pitch : 0.28 mm(≒ AG 0.24 mm)
Scanning frequency:	H: 16.625 kHz (PAL)/15.75 kHz (NTSC) V: 50/60 Hz
Horizontal resolution:	More than 750 TV lines
Power requirements:	230 V AC ± 10%, 50/60 Hz
Power consumption:	0.6 A
Colour temperature:	9300°K/6500°K (selectable)
Input terminals	
Input A/B: Composite video	1.0 V(p-p), 75 ohms, negative sync, termination switch provided, BNC x 2, bridged output possible
Input C: Y/C	Y: 1.0 V(p-p), 75 ohms, negative sync: C: 0.286 V(p-p), 75 ohms (NTSC); 0.3 V(p-p), 75 ohms (PAL) termination switch provided S-4pin x 2, bridged output possible
RGB	R: 0.7 V(p-p), 75 ohms; G: 0.7 V(p-p), 75 ohms; B: 0.7 V(p-p), 75 ohms; G on sync: 1.0 V(p-p), 75 ohms, negative sync; termination switch provided BNC x 6, bridged output possible
Component	Y: 1.0 V(p-p), 75 ohms, negative sync; R-Y; 0.7 V(p-p), 75 ohms; B-Y: 0.7 V(p-p), 75 ohms; termination switch provided BNC x 6, bridged output possible (common to RGB terminals)
External sync:	Composite sync. 0.2 V – 4.0 V(p-p)
Audio terminals:	RCA pin x 3 for input A, B and C channels, bridged output possible
Audio speaker:	9cm x 5cm (oval), 0.8 W output
Tally/Remote:	DIN 8-pin
Option:	Remote controller/19" rack mount unit
Power cord	Continental type (BM-H1400/2000PN) UK mains lead type (BM-H1400/2000PN-K)
Dimensions:	346 (W) x 332 (H) x 410 (D) mm (BM-H1400PN) 449 (W) x 431 (H) x 511 (D) mm (BM-H2000PN)
Weight:	16.2 kg (BM-H1400PN) 30.0 kg (BM-H2000PN)

Optional Accessories



RK-20E
Rack Mount Adapter for BM-H2000PN



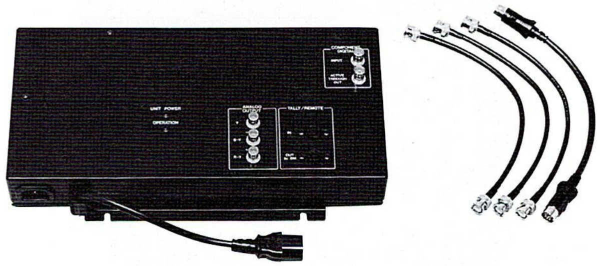
RK-1400E
Rack Mount Adapter for BM-H1400PN

RM-C550W
Wireless Remote Control unit
for BM-H2000PN/ BM-H1400PN

IF-C2000SDE

COMPONENT DIGITAL
4:2:2

Component PAL/NTSC



- **Signal Compatibility, Auto Select 525/60 or 625/50**
- **SMPTE 259M Compatible**
- **Active Loop Through provided**
- **World-wide Power Loop Through**
- **AC Power Loop Through**
- **Mountable on the Back of BM Monitor Line-up**

IF-C2000SDE

SDI UNIT	Serial digital interface unit
Signal format	525/60, 625/50, auto select
Input	D1 component serial digital SMPTE 259M, BNC 1CH
Loop through out	Active BNC 1CH, 200 m distance
Output	Analogue component Y, R-Y, B-Y
Sampling frequency	Y:13.5 MHz, R-Y/B-Y:6.75 MHz
Bit rate	270 MB/s, 10 BT/SAMPLE
Video bandwidth	Y:100Hz - 5.75 MHz +/–1 dB R-Y/B-Y:100 Hz - 2.75 MHz +/–1 dB
Power supply	AC120 - 230 V
Power consumption	15 W
Remote function	Tally,input select, control 1/2

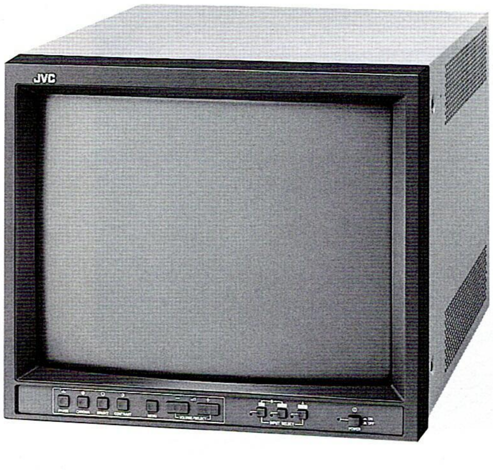
Colour Monitors

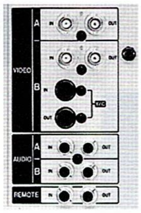
TM-1700PN 17"

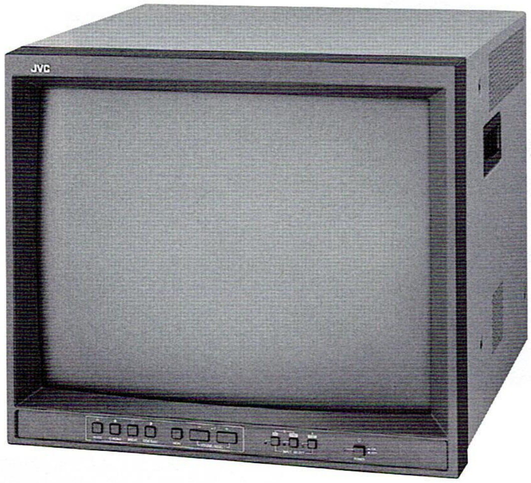
PAL/NTSC

TM-2100PN 21"

PAL/NTSC







TM-1700PN:

- **High 550 Horizontal TV lines resolution picture from unique 17 inch CRT**
- **Vertical Stripe phosphors**
- **16:9 or 4:3 selectable aspect ratio**
- **Brightness peak suppression system reduces tube wear**
- **PAL/NTSC auto selection**
- **Built-in speaker**
- **User-friendly on-screen display menu**
- **Memory function**
- **Control lock**
- **Wired remote control**
- **Rugged metal cabinet**
- **Optional RK-1700E rack mount**

TM-1700PN	Colour video monitor
Colour system	PAL/NTSC, Auto select
CRT	17" diagonal, in-line guns, stripe pitch of 0.42 mm
Horizontal resolution	550 TV lines
Colour temperature	6,500 degrees K / 9,300 degrees K (selectable)
Power requirement	230 V AC, 50/60 Hz
Power consumption	0.6 A
Video Input A: Composite	1.0 VB (p-p), 75 ohms, negative sync, auto-termination, BNC x 2, bridged out possible
Video Input B: Composite	1.0 VB (p-p), 75 ohms, negative sync, auto-termination, BNC x 2, bridged out possible
Video Input B: Y/C	Y: 1.0 V (p-p), 75 ohms, negative sync C: 0.286 V (p-p), 75 ohms (NTSC) C: 0.3 V (p-p), 75 ohms (PAL) Auto termination, DIN 4-pin x 2, bridged out possible
Audio input / output	RCA pin x 4 for input A and input B channels, bridged out possible
Audio output power	1 W
Power cord	Continental type (TM-1700PN) UK mains lead type (TM-1700PN-K)
Remote terminal	RCA pin x 2, bridged out possible
Dimensions	395 (W) x 334.3 (H) x 420.5 (D) mm (14-1/4" x 13-1/4" x 15-1/2")
Weight	17.2 kg

TM-2100PN:

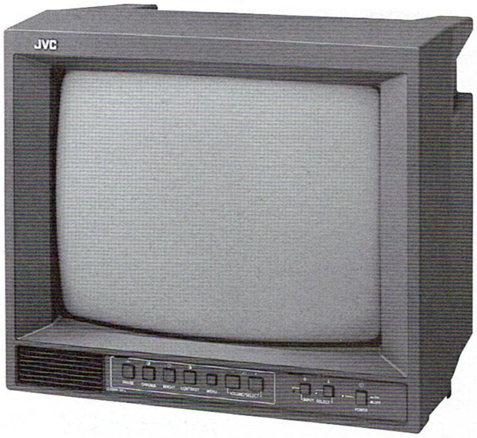
- **450 Horizontal TV lines resolution picture from 21 inch CRT**
- **Vertical Stripe phosphors**
- **16:9 or 4:3 selectable aspect ratio**
- **Brightness peak suppression system extends tube life**
- **PAL/NTSC auto selection**
- **Built-in speaker**
- **User-friendly on-screen graphical menu**
- **Memory function**
- **Control lock**
- **Wired remote control**
- **Rugged metal cabinet**

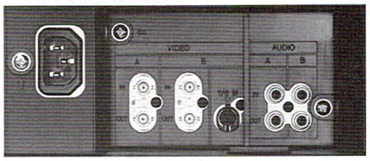
TM-2100PN	Colour video monitor
Colour system	PAL/NTSC , Auto select
Horizontal resolution	450 TV lines
Power requirement	230 V AC, 50/60 Hz
Power consumption	MAX 0.72 A
Video Input A: Composite	1.0 VB (p-p), 75 ohms, negative sync, auto-termination, BNC x 2, bridged out possible
Video Input B: Composite	1.0 VB(p-p), 75 ohms, negative sync, auto-termination, BNC x 2, bridged out possible
Video Input B: Y/C	Y: 1.0 V (p-p), 75 ohms, negative sync C: 0.3 V (p-p), 75 ohms (PAL) C: 0.286 V (p-p), 75 ohms (NTSC) Auto termination, DIN 4-pin x 2, bridged out possible
Audio input / output	RCA pin x 4 for input A and input B channels, bridged out possible
Audio output power	1 W
Remote terminal	RCA pin x 2, bridged out possible
Power cord	Continental type (TM-2100PN) UK mains lead type (TM-2100PN-K)
Dimensions	476 (W) x 407.5 (H) x 492 (D) mm (18.-3/4" x 16-1/16" x 19-3/8")
Weight	28.5 kg

Colour Monitors

TM-A14PN

PAL/NTSC





TM-A14PN

- 320 Horizontal TV lines picture from 14 inch CRT
- Vertical Stripe phosphors
- NTSC / PAL auto selection
- Built-in speaker
- User-friendly on-screen display menu
- Control lock
- Optional RK-A14E rack mount

TM-A14PN	Colour video monitor
Colour system	PAL/NTSC, Auto select
CRT	14" (diagonally measured) in-line guns, stripe pitch of 0.65 mm
Scanning frequency	H: 15.625 (PAL) / 15.75 kHz (NTSC) V: 50/60 Hz
Horizontal resolution	320 TV lines
Power requirement	230 V AC, 50/60 Hz
Power consumption	0. 5 A
Colour temperature	6,500°K
Video Input A: Composite	1.0 Vp-p, 75 ohms, negative sync, auto-termination, BNC x 2, bridged out possible
Video Input B: Composite	1.0 Vp-p, 75 ohms, negative sync, auto-termination, BNC x 2, bridged out possible
Video Input B: Y/C	Y: 1.0 Vp-p, 75 ohms, negative sync C: 0.3 Vp-p, 75 ohms (PAL) C: 0.286 Vp-p, 75 ohms (NTSC) Auto termination, DIN 4-pin x 2, bridged out possible
Audio input / output	RCA pin x 4 for input A and input B channels, bridged out possible
Audio output power	1 W
Power Cord	Continental type (TM-A14PN) UK mains lead type (TM-A14PN-K)
Remote terminal	RCA pin x2, bridged out possible
Dimensions	368 (W) x 310 (H) x 371.5 (D) mm (14-1/2" x 12-1/4" x 14-11/16")
Weight	9.5 kg (20.9 lbs.)

TM-A10E 10"

PAL

TM-A10E

- 25 cm (10") Full-Square CRT with 90° deflection, in-line guns and vertical stripe pitch of 0.50 mm
- Two units can be mounted side-by-side in a standard EIA (optional accessory: RK-A10E) and DIN rack
- Durable, space-saving metal cabinet
- Horizontal resolution of more than 300 lines
- Composite video input terminal (BNC). Bridged output provided
- Built-in 8 cm round speaker with 1 W audio output

Type	Colour video monitor
Colour system	PAL
Power requirement	230V AC, 50Hz
Power consumption	0.33A (Max.)
CRT	10" (25 cm) diagonally measured, 90° deflection, in-line guns, vertical stripe pitch of 0.50 mm
Scanning frequency	H: 15.625 kHz, V: 50 Hz
Horizontal resolution	More than 300 TV lines
Picture size (Over Scan)	Horizontal: +10%, ±5% Vertical: +5%, ±5%
Misconvergence (Max.)	Zone A: Max. 0.3 mm Zone B: Max. 0.9 mm
Colour temperature	6500°K
Audio output	1W
Speaker	8 cm round x 1
Video connection	BNC x 2 (1 for bridged output), 1.0V(p-p), 75 ohms, negative sync, termination switch provided
Audio connection	Phone x 2 (1 for bridged output)
Power Cord	Continental type (TM-A10E) UK mains lead type (TM-A10E-K)
Dimensions	222 (W) x 227 (H) x 315 (D) mm
Weight	6.9 kg

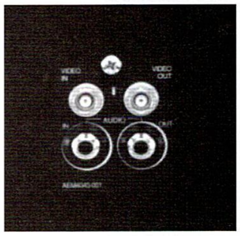
RK-A10E
Rack Mount Adapter
(Two TM-A10E monitors can be mounted in a standard EIA rack)

Colour Monitors

TM-140E 14″

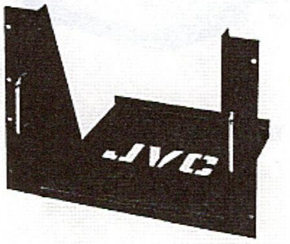
PAL

EUROPE only



- 35 cm (14-inch) CRT with a dot pitch of 0.63 mm
- Sharp picture quality with 320 lines of horizontal resolution
- Video and audio loopthrough
- Low power consumption (70 W max)
- Built-in speaker
- Rack mountable (with RK-1400E rack mount kit)

Type	Colour Video monitor
Colour system	PAL
Power requirement	230V AC, 50Hz
Power consumption	70W (max.)
Power cable	Provided detachable UK mains lead type
CRT	35cm (14") diagonally measured. 90° defection, in-line guns dot pitch 0.63 mm
Audio output	1 W RMS
Speaker	Single, built-in, 50 x 90 mm
Video connection	BNC x 2; 1.0V(p-p), 75 ohms
Audio connection	Phono x 2: 390 mV RMS. high impedance with loopthrough, auto termination
Weight	13 kg
Dimensions (W x H x D)	348 x 332 x 410 mm



RK-1400E
Rack Mount Adapter

TM-2100E 21″

PAL

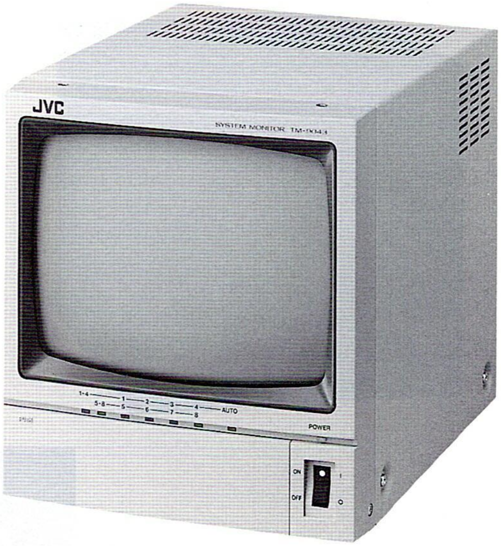
- Horizontal resolution of more than 550 TV lines
- 55 cm (21-inch) (diagonally-measured) FS (Full-Square) data-grade CRT
- Multiple professional functions useful for video editing
  Under Scan function, Pulse Cross circuit, Blue Check function, Colour Off function, Horizontal AFC Select switch
- Full range of terminals required by professionals: (bridged output possible)
  1) RGB analogue input terminals for wider applications including medical and industrial.
  2) 7-pin separated Y/C terminals for S-VIDEO
  3) BNC terminals for composite video signal
  4) RCA terminals for external audio signal (mono).
- Heavy duty metal cabinet
- Built-in front speaker

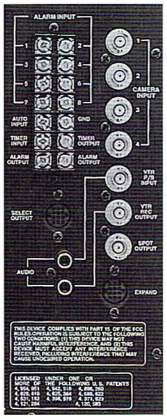
Colour system	PAL
CRT	21" measured diagonally; FS, data-grade; in-line guns; dot pitch 0.57 mm
Power requirement	220 – 240 V AC, 50/60 Hz
Power consumption	Max. 0.72 A
Audio output	1.5 W
Speaker	12 x 5 cm oval x 1
Composite video input	A: BNC x 2 (1 for bridged output); 1.0 Vp-p, 75 ohms, termination switch provided B: BNC x 2 (1 for bridged output); 1.0 Vp-p, 75 ohms, termination switch provided
Separated Y/C video input	7-pin x 2 (1 for bridged output) Y: 1.0 Vp-p, 75 ohms, negative sync C: 0.3 Vp-p, 75 ohms, termination switch provided
RGB input	RGB: BNC x 6 (3 for bridged output); 0.7 Vp-p, 75 ohms, termination switch provided SYNC: BNC x 2 (1 for bridged output); 1 – 4 Vp-p, 75 ohms, negative sync termination switch provided
Audio input	RCA × 2: (1 for bridged output): 390 mV rms, high impedance B: same as line A Y/C: same as line A RGB: same as line A
Dimensions	496 (W) × 457.5 (H) × 478.5 (D) mm
Weight	34.6 kg

B/W Video Monitor

TM-9043EG 9″

- **High Resolution**
  The TM-9043EG has a super high resolution of 700 horizontal lines for exceptional picture quality.
- **Multi-Camera Connection**
  A built-in 4-input camera control unit connects the TM-9043EG with up to four cameras via coaxial cable for multiplex operation.
  The TK-S140E video camera is powered by the TM-9043EG monitor, wich simplifies the system's structure.
- **Automatic Switching Function**
  The TM-9043EG has an integrated sequential operating function that automatically switches over between images captured by up to four cameras after a set time.
- **Alarm Function**
  With external sensors connected, the TM-9043EG can be activated as part of an alarm system.


JVC
SYSTEM MONITOR TM-9043
AUTO
POWER
ON
OFF


ALARM INPUT
1
2
3
4
5
6
7
8
AUTO INPUT
GND
TIMER INPUT
TIMER OUTPUT
ALARM OUTPUT
ALARM OUTPUT
CAMERA INPUT
VTR P/B INPUT
SELECT OUTPUT
VTR REC OUTPUT
SPOT OUTPUT
AUDIO
EXPAND
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.
LICENSED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS

Model	TM-9043EG
Picture tube	9",90° deflection
Horizontal resolution	More than 700 lines (at centre)
Scanning frequencies	H: 15.625 kHz V: 50Hz
Sequential switcher	x 4 duration
	Internal 0.3 to 30 sec, External from 0.3 sec.
Input	Camera x 4: (power for TK-140E only) VTR playback: VS, 1.0 V (p-p), 75 ohms
Output	VTR : VS, 1.0 V (p-p), 75 ohms Spot : VS, 1.0 V (p-p), 75 ohms
S/N ratio	More than 55 dB
Video frequency response	15 kHz to 9 MHz
Sweep linearity	—
Power supply	230 ~ 240 V AC
Power consumption	Approx. 65 W
Ambient temperature range	–10°C to +50°C (14°F to 122°F)
Weight	Approx. 7 kg

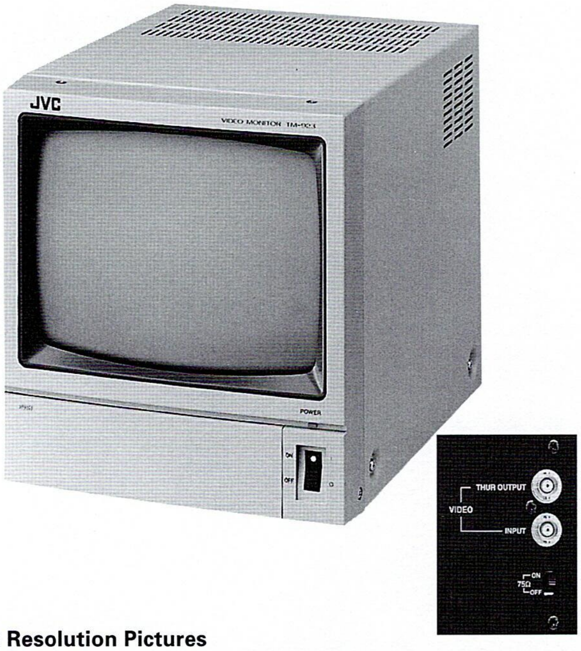
Optional System Unit

JVC
TK-S140 VIDEO CAMERA
BF LOCK

TK-S140E

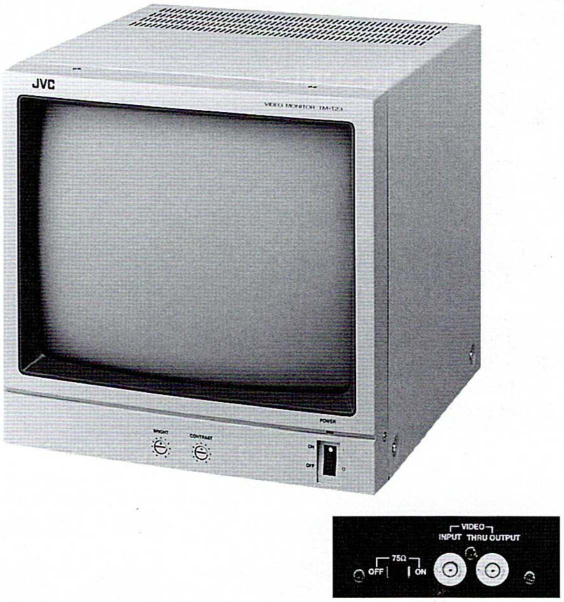
B/W Video Monitor

TM-923E 9″


JVC
VIDEO MONITOR TM-923
POWER
ON
OFF
THUR OUTPUT
VIDEO
INPUT
ON
75Ω
OFF

- **High Resolution Pictures**
  With 700 lines of horizontal resolution, the monitor provides sharp reproduction of every detail.
- **Looped-through Output with convenient looped-through connection available.**
- **Flexible Mounting**
  Two TM-923Es can be mounted together in a standard EIA 19" rack using the optional UC-P1016U Rack Mount Adapter.

TM-123E 14″


JVC
VIDEO MONITOR TM-123
BRIGHT
CONTRAST
POWER
ON
OFF
VIDEO
INPUT
THRU OUTPUT
75Ω
OFF
ON

- **High Resolution Pictures**
  With 700 lines of horizontal resolution, the monitor provides sharp reproduction of every detail.
- **Looped-through Output with convenient looped-through connection available.**
- **Flexible Mounting**
  Can be mounted in a standerd EIA 19" rack using the optional UC-P1027U Rack Mount Adapter.

Model	**TM-923E**	**TM-123E**
Picture tube	9", 90° deflection (230BTB4)	14", 90° deflection
Horizontal resolution	More than 700 lines (at centre)	←
Scanning frequencies	Horizontal: 15.625kHz , Vertical:50Hz	←
Sequential switcher	—	—
	—	—
Input	Video × 1: VS, 1.0 V (p-p), 75 ohms (BNC)	←
Output	(loop-through) Video × 1: VS, 1.0 V (p-p), 75 ohms (BNC)	←
S/N ratio	More than 55 dB	←
Video frequency response	15 kHz to 9 MHz	←
Sweep linearity	Less than 7%	←
Power supply	220 ~ 240 V AC, 50/60Hz	←
Power consumption	Aprox. 25 W	Approx. 27 W
Ambient temperature range	–10°C to +50°C (14°F to 122°F)	←
Weight	Approx. 6.3 kg	Approx. 10.5 kg

Graphic / Computer Presentation Systems

Visual Presenter

AV-P700E 75

Display Monitor

TM-290ZE 29″ 76

Flat Panel Plasma Display

GD-V425PZW 42″ 852x480 16:9 77

LCD Computer/Video Projector

LX-D700E 800x600 750 Lumen 78

D-ILA Computer/Video Projectors

DLA-G10E 1365x1024 1000 lumens 79
DLA-S10E 1365x1024 1000 lumens 79

Hughes-JVC ILA Single Lens Projectors

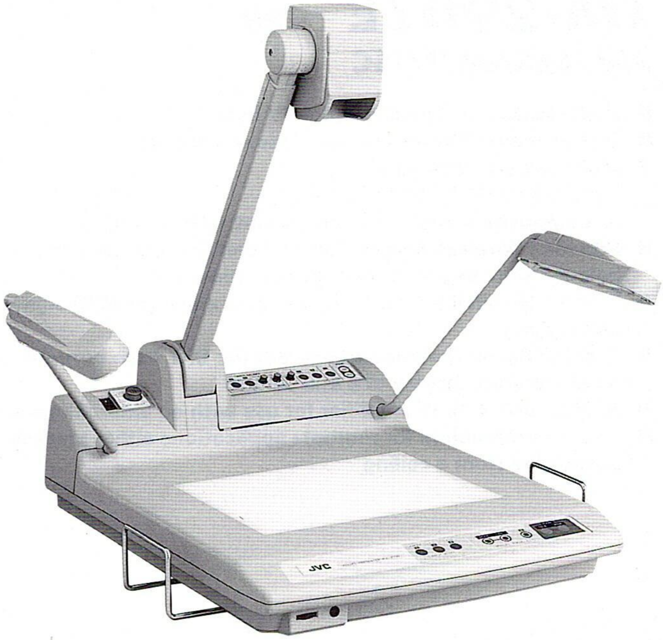
ILA-100 1600x1200 1850 lumens 82
ILA-220(SC) 1600x1200 1850 lumens 83
ILA-230(SC) 1600x1200 2700 lumens 83
ILA-230HD 1920x1080 2025 lumens 83

ILA Triple Lens Projectors

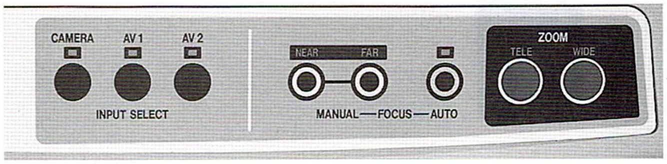
ILA-530(SC)/430(SC)/330(SC)
2000 x1280 2500 lumens 85
ILA-540SC/440SC/340SC
2000x1280 3700 lumens 85
ILA-560D(SC)/460D(SC)/360D(SC)
1920x1080 5200 lumens 85
ILA-570SC/470SC/370SC
2000x1280 6000 lumens 85
ILA-12K 2000x1280 12,000 lumens 87
Accessory/dimensions 89

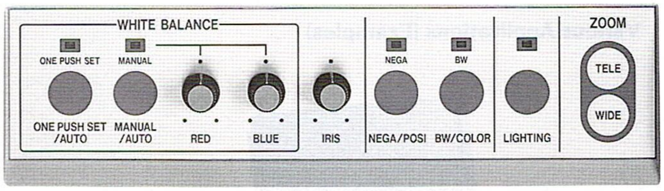
Visual Presenter

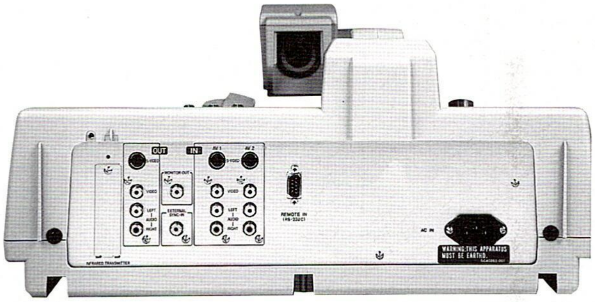
AV-P700E



- Easy operational controls
- 11x power zoom with auto-focus camera
- 450 TV lines high resolution (Y signal centre)
- Built-in book holder
- Gen-lock to meet teleconferencing requirements
- Equipped with large backlight and adjustable side lamps
- 35mm slide film holder on camera head
- Remote control from a PC through RS-232C interface
- Negative/Positive image function
- Monochrome/Colour selector
- Mixing microphone jack with volume control and stereo audio output
- White balance: 3 mode selectable (Full auto/One-push set/ Manual)







GENERAL	
Power requirements	220-240 V AC, 50/60 Hz
Power consumption	28 W
Weight	8.1 kg/17.9 lbs.
OPTICAL	
Lens	F1.8-2.6, f=5.5-62 mm (11x)
Shooting area	393 x 295 mm / 15-1/2 x 11-5/8 inches max. (100% scan)
Zoom	Motorized
Focus	Auto/Motorized
Iris	Auto (with fine-tuning)
LIGHTING	
Side lamp	6 W x 2 (inverter lighting)
Backlight lamp	6 W x 2 (inverter lighting, size equivalent to A4)
CAMERA HEAD	
Television system	PAL
Image pickup device	1/3" Interline-transfer CCD
Number of pixels (effective)	771 horizontal x 492 vertical
Synchronization system	Internal/External, auto-select
Horizontal resolution	More than 350 TV lines (Y signal centre)
Vertical resolution	More than 450 TV lines
S/N ratio	More than 46 dB
Negative/Positive inversion	Available
BW/Colour selection	Available
White balance	Full-auto/One-push set/Manual

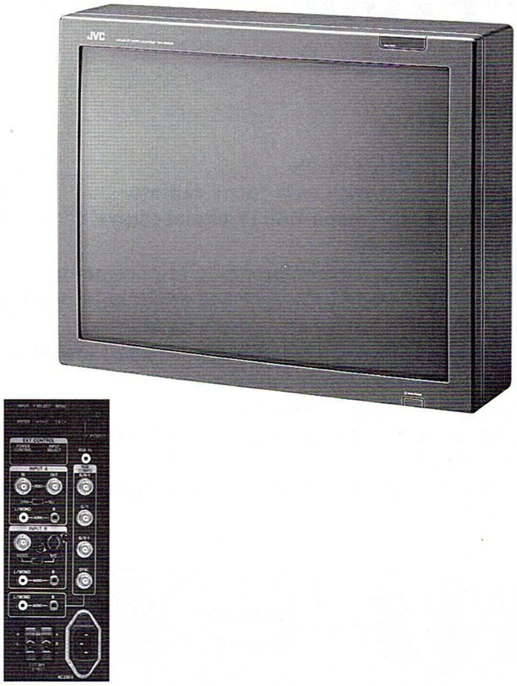
VIDEO/AUDIO	
Input select	Available (Camera/AV1/AV2)
Input connectors	
• Composite video	RCA pin jack x 2 (1V(p-p), 75 ohms)
• S-Video	Mini DIN 4pin x 2 (Y: 1V(p-p), 75 ohms)(C: 0.3 V(p-p), 75 ohms)
• Audio (stereo)	RCA pin jack x 2 pairs, (-10 dBs, 10k ohms or more)
• Microphone (mono)	Phone jack x 1 (-60 dBs, 600 ohms)
• External GENLOCK	RCA pin jack x 1 (1 V(p-p), 75 ohms
External remote control	RS-232C (D-SUB 9-pin)
Output connectors	
• Composite video/Monitor	RCA pin jack x 2 (1 V(p-p), 75 ohms)
• S-Video	Mini DIN 4-pin x 1 (Y: 1 V(p-p), 75 ohms)(C: 0.3 V(p-p), 75 ohms)
• Audio (stereo)	RCA pin x1 pair (-10 dBs, 200 ohms)
ENVIRONMENTAL CONDITIONS	
Temperature	5°C- 40°C (41°F - 104°F)
Humidity	30% - 85%

Colour Video Display Monitor

TM-290ZE 29″

PAL/SECAM/NTSC

- High resolution; 700 horizontal TV lines
- Digital comb filter for enhanced picture quality
- Multi-format video input:
  - — PAL/SECAM/NTSC/NTSC 4.43
  - — Composite video, Y/C, Component, RGB analogue
- Provided Wireless Remote Control unit (picture adjustment, white balance adjustment, ID system operation, etc.)
- RGB Ys terminal for superimposing an analogue RGB signal on a video signal
- "Screen Saver" function to prevent the CRT from burnout caused by the lengthy display of a still picture
- Built-in 10W + 10 W amplifier for use with an external speaker
- Tough construction for multiple applications either stacked or suspended from a ceiling



Type: Colour Video monitor

Colour system: PAL/SECAM/NTSC/NTSC 4.43

Picture tube: 29" (diagonally measured)
data-grade flat-square tube,
110° deflection

Power requirement: 230 V AC, 50 /60 Hz

Power consumption: 130 W

Horizontal resolution: 700 TV lines

Input A Composite video (BNC × 2)
1 V(p-p), 75 ohms, bridged output possible
Audio (RCA; L×1, R×1)
500 mV rms, high impedance

Input B Composite video (BNC × 1) 1 V(p-p), 75 ohms
Y/C separate video (4-pin × 1)
Y:1 V(p-p), 75 ohms
C: 0.3 V(p-p) (PAL), 75 ohms
Audio (RCA; L×1, R×1)
500 mV rms, high impedance

RGB/Component inputs: R/R-Y, G/Y, B/B-Y, (BNC×3) 0.7 V(p-p), 75 ohms
Sync (BNCx1) 1.0~4.0 V(p-p), 75 ohms
Audio (RCA; L×1, R×1)
500 mV rms, high impedance

Ys input: RCAx1
L: Video 0~0.4 V, 75 ohms
H: RGB 1.0~4.0 V, 75 ohms

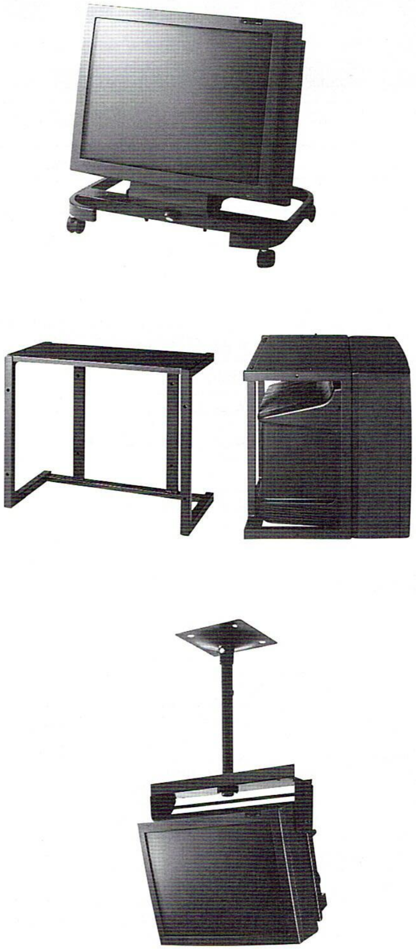
Audio outputs: 10 W + 10 W, 8 ohms (for external speakers)

Ext. control: Input × 1, power × 1 (mini-jack)

Weight: 42.3 kg

Dimension: 638 (W) × 508 (H) × 495 (D) mm

Various Applications (Examples)

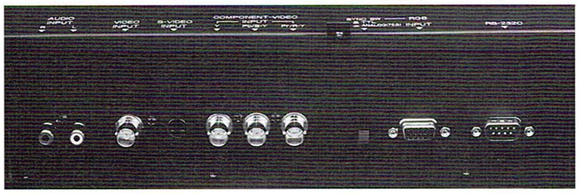


Widescreen Flat Plasma Display Monitor

GD-V425PZW 42″

PAL/SECAM/NTSC

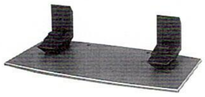
- Thin 150 mm (5.9 inch) depth
- Extra high contrast ratio of 400:1
- Wide screen computer display, expands 640 x 480 to 852 x 480 for high horizontal resolution
- Selectable widescreen modes: standard and expanded 640 x 480, normal 4:3, Auto detect, Uniform centre, vertical shift and squeeze for captions or subtitling, zoom and horizontal zoom
- 16.7 million colours from 256 level colour levels for each Red, Green and Blue signal
- Totally flat display with wide 160 degree angle of view in both horizontal and vertical directions
- No distortion at corners or edges
- Not effected by magnetic fields
- Wide range of inputs: Composite, S-Video, Component (3 BNC), RGB (D-sub 3 row 15-pin)
- Wide range of signal frequencies: Horizontal 15.73 to 60 kHz, vertical 50 to 75 kHz
- Integrated stereo audio speakers (2 W + 2 W)
- Easily mountable weight of approximately 40 kg (88.2 lb.) without bracket.
- Many optional mounting accessories; horizontal and vertical stands and brackets, 0 and 10 degree wall brackets, 0 to 15 degree ceiling bracket



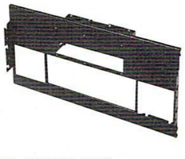
Screen size	92 (W) x 51.8 (H) cm	(wide 42 inch diagonal)
Aspect ratio	16:9 W x H	
No. of pixels	852 x 480 W x H	
Display colours	16.7 million	RGB each of 256 hues
Contrast ratio	400:1 (typical)	
Display modes	Wide:	4:3 expanded horizontally to full 16:9
	Normal:	4:3 centre screen
	Zoom:	4:3 expanded equally to fit 16:9 (top/bottom cut)
	Non-linear wide:	Centre uniform, sides expanded of 4:3 image to 16:9
	Auto:	Wide/zoom modes automatically selected
Viewing angle	160 degrees	(Horizontal and Vertical)
Audio output	4 W (2 W + 2 W)	Two built in speakers
Video system	NTSC, PAL, SECAM	N-PAL, M-PAL, 4.43 NTSC
Display Frequency	Horizontal:	15.73 kHz to 60.0 kHz
	Vertical:	50 Hz to 75 Hz

Inputs	Video	Composite:	BNC terminal x 1, 1Vp-p 75 ohm
		S-Video input:	Mini DIN 4 pin (S-Video connector) x 1 Y: 1Vp-p, 75 ohm C: 0.286 Vp-p (NTSC) 75 ohm C: 0.3 Vp-p (PAL)
		Component:	BNC terminal x 3 Y: 1Vp-p, 75 ohm Pb/R-Y: 0.7 Vp-p Pr/R-Y: 0.7 Vp-p
		Analogue RGB	D-sub 3 row 15 pin x 1 Video signal 1 Vp-p Sync signal TTL or 0.7Vp-p Switchable
	Audio		RCA pin terminal x 2 (L/R) 200 mVrms, more than 10 Kohm
	Control signal		RS-232C D-sub 9 pin x 1
Power requirements	AC 100 ~ 240 V		50/60 Hz
Power consumption	350 W		
Operating environment	temperature		0 degrees C to 40 degrees C
	humidity		20 ~90 percent, non condensation
Dimensions	103.5 (W) x 64 (H) x 15(D) cm		(40.75" (W) x 25.20" (H)x 5.91"(D))
Weight	Approx. 40 kg		(88.2 lb)

Optional Accessories

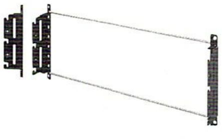


TS-C42P1W Stand Unit
Dimensions (W x H x D):
60 x 17 x 30 cm



TS-C42P4W
Ceiling Suspension Unit
Mounting angle: 0° - 15° adjustable
Dimensions (W x H x D):
94.1 x 48.4 x 14.5 cm

TS-C42P3W
Wall Mounting Unit
Mounting angle: 10°
Dimensions (W x H x D):
94.1 x 38 x 15.7 cm



TS-C42P2W
Wall Mounting Unit
Mounting angle: 0°
Dimensions (W x H x D):
94.1 x 38 x 10 cm

TS-C42P5W
Vertical Stand Unit
Mounting angle: 0°
Dimensions (W x H x D):
48.4 x 94.1 x 14.5 cm

TS-C42P6W
Wide Video Card
PCI bus for IBM PC/AT and compatibles

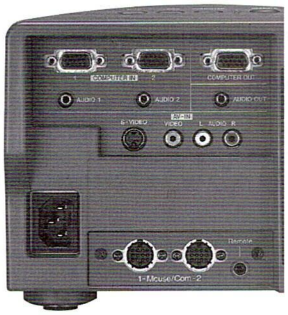
LCD Projector

LX-D700E

- **Weighing just 6.7 kg with highly compact design**
- **750 ANSI lumens with 85% uniformity across the screen**
- **Wide range of signal input possible: VGA, SVGA and XGA, Macintosh, composite video and S-VHS (Y/C) video**
- **Superb versatility — for impressive presentation**
  - **Digital special effects Freeze, Strobe, Preview and Zoom (up to x4)**
  - **Switching from one source to another with transitions such as slide wipes, corner wipes and window wipes**
  - **2 computer input allow the connection Windows computer and Macintosh at the same time**
  - **Wireless mouse control**
  - **Resizing**

Resizing	**input**	**screen resolution**
	VGA	**640 x 480 (smaller display)**
		800 x 600 (digital expansion)
	XGA	**800 x 600 (digital compression)**
		1024 x 768 (partial display)

- **Manual adjustment of colour temperature**
- **Extended lamp life (2,000 hrs) with easy replacement**
- **Automatic voltage adjustment**
- **Easy setup via 7 different language on-screen menus**
- **Built-in stereo speakers**



LCD Panels:	1.3-inch TFT (800 x 600 pixels) x 3
Projection Lens:	Manual zoom (x 1.3) Manual focus
Brightness:	750 ANSI lumens (typical)
Uniformity:	85% (typical)
Resolution:	800 x 600 pixels 600 Horizontal TV lines (video)
Colour reproduction:	16.7 million colours
Projection methods	Front/rear/upside down
Special Function (digital):	Freeze, Strobe, Preview, Zoom (max x4)
Scanning Frequency:	(H) 15 ~ 68-678 kHz (for PC: 24.48 ~ 68-678 kHz) (V) 50 ~ 85 Hz (for PC: 56 ~ 85)

Input:	(PC) RGB x 2 (Video) NTSC/PAL/SECAM capability (composite/S-video)
Output:	(PC) RGB x 1 (Audio) Stereo
Port:	Mouse serial port x 2
Throw distance:	1 ~ 10 m (3.3 ~ 33 ft)
Screen Size: (diagonal)	(Wide) 762 ~ 7,620 mm (30" ~ 300") (Tel) 584 ~ 5,842 mm (23" ~ 230")
Lamp:	150 W metal halide
Audio:	Built-in stereo speakers (2 W + 2 W)
Input power:	100 ~ 120 V/220 ~ 240 V AC (50 ~ 60 Hz)
Power consumption	240 W
Dimensions:	169 x 248 x 340 mm excluding lens
Weight:	6.7 kg
Provided	AC cable, Wireless (infrared) remote control PC connection cable (D. sub 15 pin male - D.sub 15-pin male) Adapter for Macintosh x 3 (for 13"/16"/19" mode) AV cable,, PC audio cable Mouse cable x 2, Lens cap

Video/Data/Graphics Projector

DLA-G10E/DLA-S10E

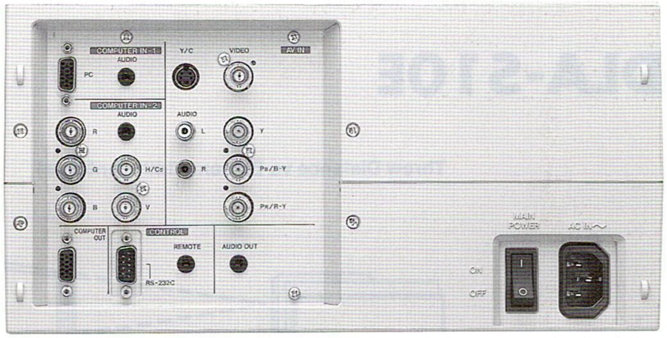
- First projector to utilise revolutionary D-ILA technology. The Direct-Drive Image Light Amplifier, or D-ILA, is an original reflective liquid crystal light valve device developed by JVC
- Projects superior brightness and high resolution large-screen images ideal for applications such as boardrooms, conference rooms, universities, trade shows and home theatres
- The DLA-G10 measures only 10 x 17 x 13 inches and weighs just 31 pounds, making it the first light valve projector that can be easily carried around and set-up for presentations
- Full pixel resolution of 1365 x 1024 (4:3) allows coverage including true 1280 x 1024 (5:4) SXGA graphics
- Superb 1000 TV lines video resolution
- Xenon arc lamp assures both high brightness of 1000 ANSI lumens and highly accurate colours
- Contrast ratio greater than 250:1
- The D-ILA is a C-MOS based reflective liquid crystal light valve upon which the image is written directly by the driving IC. The liquid crystals change the reflectivity in accordance with the signal level. Vertical liquid crystal (homeotropic) alignment achieves very fast response time (rise plus fall time equal to less than 16 milliseconds). Light from xenon arc lamp travels through a polarised beam splitter, reflects off the D-ILA device, then travels through the projection lens onto the screen.
- The DLA-G10 projector utilises Adaptive DPC (Digital Pixel Conversion) technology to optimise picture quality and to assure smooth, clear images no matter what input signal resolution; ranging from VGA to SXGA
- Variable scanning frequencies from 15-82 kHz horizontal, 50-78 Hz vertical for compatibility with a wide range of high bandwidth source signals
- A 10-bit Digital Gamma Correction gives accurate grey scale reproduction.
- The projector is ready for use within two minutes of switching on the power
- Single lens construction eliminates registration adjustment; with power zoom, power focus and full remote-control the projector is extremely easy to "plug and play"
- Flexible for front and rear projection, including ceiling mounting
- User replacable Lamp
- Dual image signal computer inputs
- RS-232C serial control
- Remote control included

DLA-G10E

- When projector is flat and level with bottom or top of screen, DLA-G10E is free from keystone adjustment with its pre-adjusted 50% off-axis lens position.

DLA-S10E

- When projector is lined up with the centre axis of the screen, DLA-S10E is free from keystone adjustment with its pre-adjusted on-axis lens position.

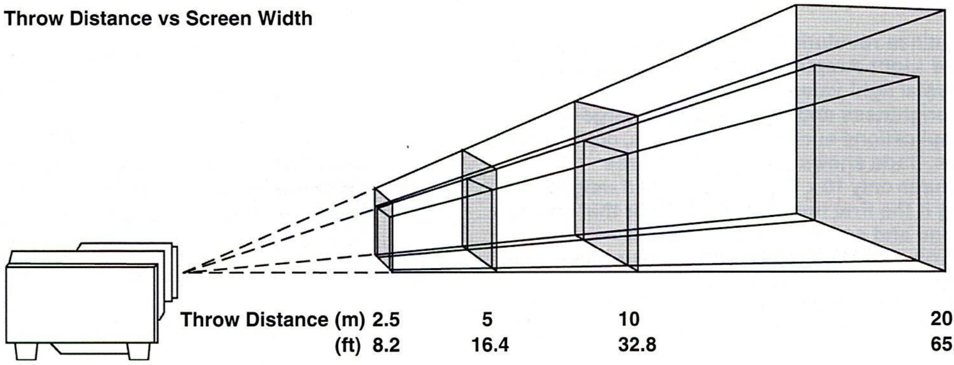


D-ILA is a trademark of Victor Company of Japan, Limited (JVC)

Video/Data/Graphics Projector

DLA-G10E

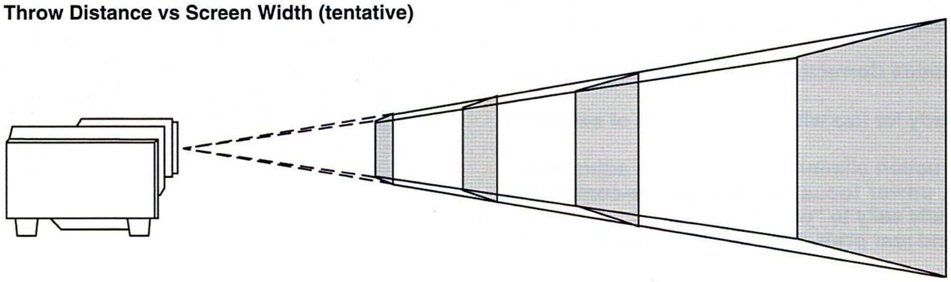
Throw Distance vs Screen Width



				2.5	5	10	20
Throw Distance		(m)		2.5	5	10	20
		(ft)		8.2	16.4	32.8	65.6
Screen Width	Tele	(m)		0.9	1.7	3.5	7.0
		(ft)		2.8	5.7	11.5	23.1
	Width	(m)		1.3	2.6	5.3	10.7
		(ft)		4.2	8.6	17.3	35.1

DLA-S10E

Throw Distance vs Screen Width (tentative)



Throw Distance	**(m)**	**0.78**	**2.5**	**5**	**10**
	(ft)	**2.6**	**8.2**	**16.4**	**32.8**
Screen width	**(m)**	**0.78**	**2.5**	**5**	**10**
	(ft)	**2.6**	**8.2**	**16.4**	**32.8**

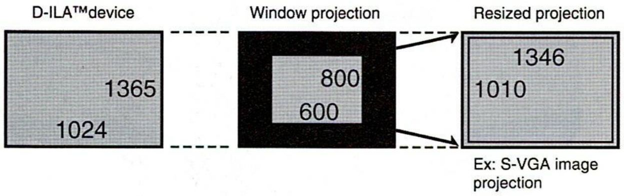
Image device	D-ILA:	Three 1.4 million pixel panels
Brightness		1,000 ANSI lumens (typical)
Resolution		1,365 x 1024 pixels (4:3)
	True SXGA	1,280 x 1024 (5:4)
	Video	1,000 Horizontal TV Lines
Contrast Ratio		More than 250:1
Input Frequency Capability	Horizontal	15 - 82 kHz
	Vertical	50 - 78 Hz
Input Signals:		RGB HV, Multi-system Composite, YC, Component (Y/R - Y/B -Y)
Throw Distance		2.5 - 20 m (8 - 65 ft)
Projection Lens		1.5x power zoom, power focus
	Wide	2:1 (Throw distance to screen width ratio)
	Tele	3:1
	DLA-G10	50% off axis
	DLA-S10	1:1 on-axis

Screen size DLA-G10E	Wide	1,600 mm -- 13,385 mm (diagonal)
	Tele	1,066 mm -- 8,788 mm (diagonal)
DLA-S10E		975 mm -- 12,500 mm (diagonal)
Lamp		400 W, Xenon
Input power		200-240 V AC, 50/60 Hz
Power consumption		630 W
Dimensions (W x H x D)		425 x 246 x 339 mm excluding lens
Weight		15 kg (33 lbs.)
Provided accessories		AC cable, wireless (infrared) remote control, PC connection cable (D-sub 15-pin male -- D-sub 15-pin male), adapter for Macintosh, AV cable, BNC-RCA adapter, audio cable, lens cap, operation manual, battery for remote control unit x 2

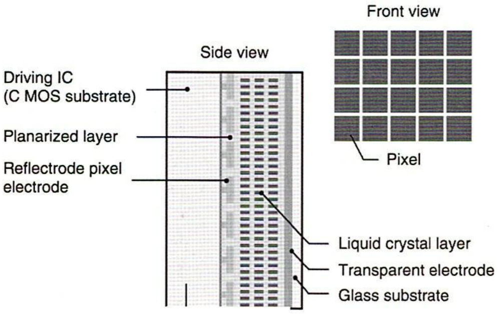
Video/Data/Graphics Projector

DLA-G10E/DLA-S10E

Window or Resizing projection

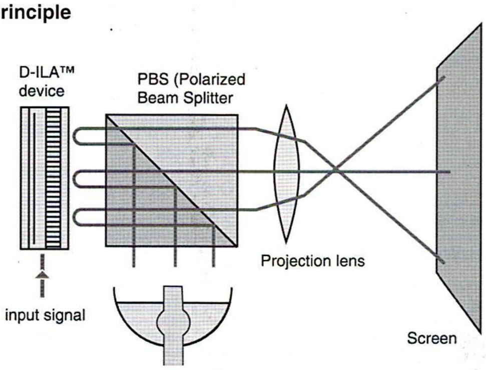

D-ILA™device
1365
1024
Window projection
800
600
Resized projection
1346
1010
Ex: S-VGA image projection

Device Structure

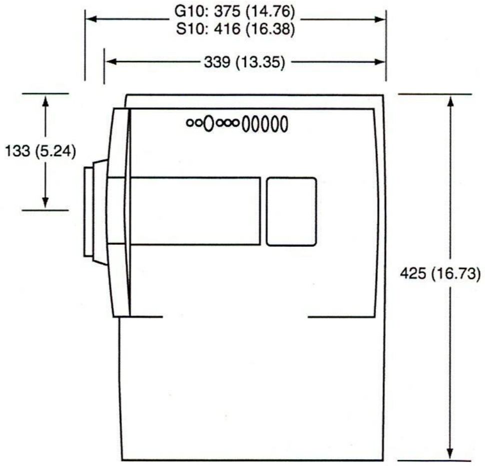

Front view
Side view
Driving IC
(C MOS substrate)
Planarized layer
Reflectrode pixel electrode
Pixel
Liquid crystal layer
Transparent electrode
Glass substrate

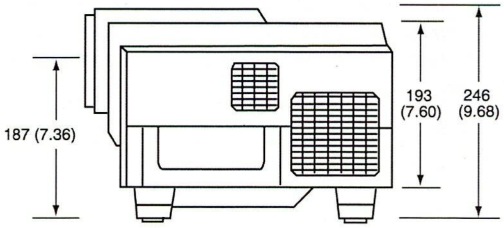
ectly in
al

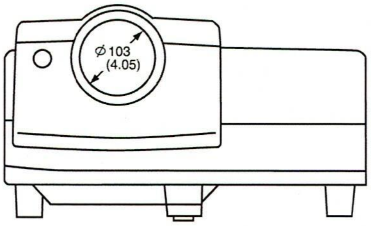
Operation Principle


D-ILA™ device
PBS (Polarized Beam Splitter
input signal
Projection lens
Screen

Dimensions


G10: 375 (14.76)
S10: 416 (16.38)
339 (13.35)
133 (5.24)
425 (16.73)

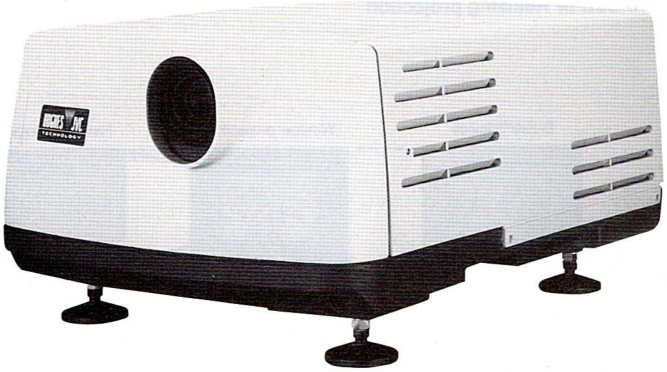

187 (7.36)
193 (7.60)
246 (9.68)



Unit: inches (mm)

ILA Compact, Single Lens Projector

ILA-100



- The only high-bright large screen projector available with true 1600 x 1200 capability plus the portability and user friendliness of a single lens design.
- With its high performance, ease of use and many lens options, the ILA-100 is a versatile projector for a wide variety of applications including boardrooms, training rooms, tradeshows and high-resolution computer graphics display. Raster shaping and edge blending capabilities make it ideal for curved screen applications like simulators and domed theaters.

- New compact Image Light Amplifier device built with advanced materials to ensure both reliability and performance. Compact ILA® light valves are coupled to high resolution CRTs with a new generation fibre optics system.
- Dramatically improved picture resolution and uniformity, while decreasing projector weight and size.
- Newly designed illumination and electronics systems.
- Small size, only 165 pounds,
- Big performance: 1700 lumens of light ouput, a 200:1 contrast ratio, 950 TV lines of video resolution and a 120 MHz bandwidth.
- Accepts huge range of sources from signals up to 135 kHz and 2730x2084
- Displays signals up to 1280x1024 without down-converting.
- User-friendly: modular Video Input Cards allow easy customization of inputs. Pull-down menus cut set-up time in half. Each projector factory is preset for most common sources.

ILA-100	
Brightness	2300 Centre Full White/ 1850 ANSI Lumens
Contrast	240:1
RGB bandwidth	120 MHz at -3dB
Horizontal frequency	30-135 kHz (15-135 kHz with optional Line Doubler
Vertical frequency	50-150 Hz
Aspect ratio	4:3 - 16:9 (variable)
Blanking	H: <2.3 µsec, V: <500 µsec
Source compatibility (HxV)	2730 x 2048
Resolution (HxV)	1600 x 1200
Video resolution	1200 TVL at 4:3 aspect ratio
Colour	SMPTE 240M
Convergence	Digital with 99 memories/channels
Light modulator	3 Proprietary Image Light Amplifiers(100% solid state liquid crystal light valve)
Power	110/220 V AC, 16/8 A, 50/60 Hz, 1250 W, 4265 BTUs
Light source	750 W Xenon Arc Lamp
Lamp life (typical)	1200 hours until 50% brightness
Lens options	Motorized Zoom: 3:1 - 8:1 Fixed: 1:1, 1.5:1 with offset All lenses with motorized focus
Throw distance	Zoom: 16.5' - 132' (5.0m - 40.2m), Fixed: 5' - 30' (1.5 - 9.1m)
Screen size (width)	Zoom: 5.9' - 16.7' (1.8m - 5.1m) Fixed: 4' - 20' (1.2m - 6.2m)
Keystone	Up to ± 5 deg. (H), + 25 / -15 deg; (V) Standard
Inputs	1 RGBHV port Video Input Card Options - 1 VIC Slot Available: HDTV YPrPb, RGBHV, RGBHV Graphics Enhancer Quad Standard Decoder/Line Doubler, Quad RGBHV (2 slots),
Communications ports	2 RS-232 ports
Size (HxWxL)	38.4 cm x 68.6 cm x 94.6 cm (15.1" x 27" x 37.2")
Weight	75kg (165 lbs.)
Operation temperature	10°C - 40°C (50°F - 104°F)
Accessories included	User's Guide, full function IR Remote and Cable, Data Setup Restoration Disk, AC Power Cord
Optional accessories	Colour Matching, Backlit Tethered Remote, Service Manual, plus Lenses and VIC Cards (options above)

ILA Single Lens Projectors Series 200

ILA-220(SC), ILA-230(SC), ILA-230HD

Perfect images and quick setup in the same large screen projector: single lens, sophisticated software with pull-down menus, and factory pre-sets for the most common sources. Setup typically in just 20 minutes or less for true plug-and-play operation

- Video, HDTV, data or high resolution graphics, in a wide range of aspect ratios, including 4:3 and 16:9, with big, bright, stunningly lifelike images with vivid colours, sharp contrast and crisp resolution.
- Models 220 and 230 are ideal for command and control centres, simulators, boardrooms and conference centres, universities, tradeshows, sports bars and concerts, and a wide variety of rental and staging applications.
- The Model 230HD offers the best High Definition video picture of any single lens projector; an outstanding solution for applications like HDTV production, post production, home theatre and broadcast studio sets.

Proprietary ILA® Technology; Liquid crystal light valve, coupled to the CRT with a highly refined optics system, delivers lifelike images with an unparalleled combination of brightness, colour, contrast, bandwidth and resolution. Performs far beyond limitations of conventional LCD, CRT and DMD projectors.

Industry Leading Performance

- 2300 to 3400 lumens of light output and contrast ratios up to 1000:1, Series 200 projectors shine brightly through even the highest ambient light conditions.
- Bandwidth up to 120 MHz allows every detail of the source signal to show on the screen.
- Compatibility with sources up to 105 kHz frequency and 2330x1750 resolution means you've got the headroom to display images from virtually any current or future source.

High Resolution, Non-Pixelized Display

- Series 200 projectors display images up to 1920x1080 without down-converting. That means more detail on the screen with no artifacts, dead pixels or pixel mapping errors. (Both LCD and DMD projectors rely on a fixed pixel matrix, creating pixelized images and requiring the up- or down- conversion of source material not at the native resolution of the panel) .

Xenon Arc Lamp

- Same light source used in motion picture projectors, produces pure, white illumination to ensure colour accuracy and saturation.
- This Xenon lamp is also much more stable over time than other light sources, helping to maintain a highly stable colour temperature.
- The long lamp life, up to 1200 hours, provides not only high image quality but also operating costs up to 75% lower than competing technologies.

Lenses

- A variety of Fixed and Power Zoom Lenses for countless variations of screen sizes and projector placement - up to 210 feet from the screen.
- Custom Lenses are also available, including an option specially designed for simulation applications. Developed by the world's most renowned optical manufacturers, all Hughes-JVC lenses provide sharp, ghost-free images with consistently high levels of light transmission.

Variable Mounting Positions

Any Series 200 projector may be either ceiling or floor mounted, in an upright or inverted position, for both front or rear projection. And an optional Extended Keystone range allows mounting up to 25 degrees off-axis.

VIC Cards

Video Input Card slots allow easy customisation of inputs. Options include RGBHV, Quad RGBHV, Quad Standard Decoder/ Line Doubler, HDTV Component and RGBHV Graphics Enhancer.

Special Applications

Series 200 projectors excel at specialised applications impossible with fixed matrix displays. Their ability to reshape the raster makes them an outstanding choice for curved screen applications like simulators and domed theatres. Edge Blending capabilities allow seamless panoramas, even a full 360 degree theatre in the round. Special Fast response ILAs and Fast retrace CRTs are available for display of high speed motion. And Colour Matched Optics are an ideal option for side-by-side projector applications.

ILA Single Lens Projectors Series 200

HUGHES JVC TECHNOLOGY

ILA-220(SC), ILA-230(SC), ILA-230HD

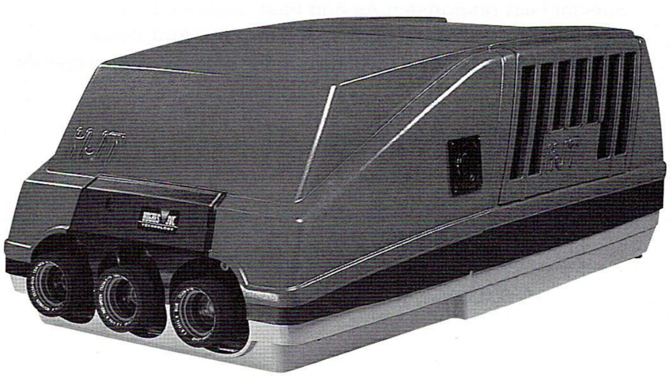
Model	220/220SC	230/230SC	230HD
Brightness	2300 Centre Full White/ 1850 ANSI Lumens	3400 Centre Full White/ 2700 ANSI Lumen	2550 Centre Full White/ 2025 ANSI Lumens (16:9) aspect ratio
Contrast	390:1 (950:1 with SC model)		1000:1
RGB bandwidth	120 MHz at -3 dB		
Horizontal Frequency	15 -105 kHz		
Vertical frequency	45 - 120 Hz		
Aspect ratio	4:3 - 16:9 (variable)		16:9 (4:3 by reducing horizontal size)
Blanking	H: <2.3 μ, V: <500 μ		
Source compatibility (HxV)	2000 x 1545		2330 x 1750
Resolution (HxV)	1600 x 1200		1920 x 1080
Video resolution	1130 TVL at 4:3 aspect ratio		1080 TVL at 16:9 aspect ratio
Colour	SMPTE 240M		
Convergence	Digital with 99 memories/channels		
Light modulator	3 Proprietary Image Light Amplifiers (100% solid state liquid crystal light valve)		
Power	110/220 VAC, 20/10 A, 50/60 Hz, 1500 W, 5118 BTUs	220 VAC, 20 A, 50/60 Hz, 2200 W, 7506 BTUs	
Light source	900 W Xenon Arc Lamp	1600 W Xenon Arc Lamp	
Lamp life (typical)	1200 hours until 50% brightness	1000 hours untill 70% brightness	
Lens options	Motorized Zoom: 2.6:1 - 5.1:1 Fixed: 1:1, 1.5:1, 7:1 Special Order: 3:1 Simulator lens (1.2:1 with adapter) All lenses with motorized focus		Motorized Zoom: 2:1 - 4:1 Fixed: 0.96:1, 1.2:1, 5.6:1 All lenses with motorized focus
Throw distance	Zoom: 13' - 102' (4 m - 31 m), Fixed: 7' - 210' (2.1 m - 64 m)		
Screen size (width)	Zoom: 5' - 20' (1.5 m - 6.1 m) 7' - 27' (2.1 m - 8.2 m)		Zoom: 6.1' - 26' (1.9 m - 8 m) Fixed: 8.7' - 33.7' (2.6 m - 10.3 m)
Keystone	Up to ±5°; (H), ±15°; (V) Standard Up to ±7° (H), ±250° (V) with Extended Range Option		
Inputs	Video Input Card Options - 3 VIC Slots Available: RGBHV (Standard all 200 series) HDTV Y, Pr, Pb, (standard 230 HD only) Quad Standard Decoder/Line Doubler (2 slots) Quad RGBHV (2 slots), RGBHV Graphics Enhancer		
Communications ports	2 RS-232 ports		
Size (HxWxL)	40.9 cm x 61.5 cm 126.2 cm (16.1" x 24.2" x 49.7")		
Weight	118 kg (260 lbs.)		
Operation temperature	10°C - 40°C (50°F - 104°F)		
Included accessories	User's Guide: 1 RGBHV VIC, Technician's IR Remote and Cable, Data Setup Restoration Disk, AC Power Cord		User's Guide: 1 RGBHV VIC, 1 HDTV VIC, Technician's IR Remote and Cable, Data Setup Restoration Disk, AC Power Cord
Optional accessories	Optional Accessories: Extended Geometry Board Set, High Speed Option (Fast CRTs, Fast ILAs), Colour Matching, Backlit Tethered Remote, Executive Backlit IR Remote, 150' Cable for Remotes, Service Manual, plus Lenses and VIC Cards (options above), shipping case.		

Brightness and contrast measured at 1024 x 768, 90 Hz, 5600°K

ILA Three Lens Projectors Models 500 International, 400 Europe, 300 North America

ILA-530(SC),ILA-430(SC),ILA- 330(SC) ILA- 540SC, ILA- 440SC, ILA- 340SC

ILA-560D(SC),ILA-460D(SC),ILA-360D(SC) ILA-570SC,ILA-470SC,ILA-370SC



When you need to entertain, teach, create or inspire, versatile and powerful, HJT Three lens projectors are ideal for video, HDTV, data and high resolution graphics, in a wide range of aspect ratios, including 4:3 and 16:9.

- Three lens Models 30, 40SC and 70SC are perfect for large, challenging venues like stadiums, arenas, theme parks, outdoor advertising, electronic cinema, concerts, broadcast studios and special events.
- For applications requiring only video and data capabilities, three lens models 60D and 60DSC combine an incredible picture with outstanding value.
- Nothing has the impact of large screen images, and nothing surpasses the image quality of HJT three-lens projectors. legendary Hughes-JVC Brightness. Razor-sharp resolution. Colors that sizzle. Spectacular images pull the audience right ino the action.
- Compare HJT Three lens projector performance spec for spec against any other large screen projectors. Examine critical factors like picture stability, lamp life, upgradeability and operating costs.

Proprietary ILA® Technology; Liquid crystal light valve, coupled to the CRT with a highly refined optics system, delivers lifelike images with an unparalleled combination of brightness, colour, contrast, bandwidth and resolution. Performs far beyond limitations of conventional LCD, CRT and DMD projectors.

Industry Leading Performance

- 3000 to 6800 lumens light output and contrast ratios up to 1200:1, Three lens projectors pack visual power in even the most brightly lit environments.

(cont.)

The highest bandwidth in the industry, up to a full 150 MHz, means the screen is bursting with detail. New Graphics Enhancement Circuitry ensures outstanding text and graphics reproduction.

Compatibility with sources up to 90 kHz frequency and 2500x1340 resolution means headroom to display images from any current or future source.

High Resolution, Non-Pixelized Display

HJT Three lens projectors display images up to 2000x1280 without down-converting for more detail on the screen and with no artifacts, dead pixels or pixel mapping errors (LCD and DMD projectors rely on a fixed pixel matrix, creating pixelized images and requiring the up- or down- conversion of source material not at the native resolution of the panel.)

- Ultra Digital Processor/Decoder enhances both video and computer presentations, combining a line doubler/line quadrupler, frame doubler and quad standard decoder.

Xenon Arc Lamp

- The same light source used in motion picture projectors produces pure, white illumination to ensure colour accuracy and saturation.
- Much more stable over time than other light sources, with a highly stable colour temperature.
- Long lamp life up to 2500 hours, provides high image quality and operating costs up to 75% lower than competing technologies.

Lenses

Huge range of lens sets, from 0.885:1 wide angle to ultra-long throw 10:1 focal lengths, gives flexibility to position the projector wherever necessary, even up to 360 feet from the screen

- Custom lenses are also available. Developed by the world's most renowned optical manufacturers, all Hughes-JVC lenses provide sharp, ghost-free images with consistently high levels of light transmission.

ILA Three Lens Projectors

Variable Mounting Positions

Flexible mounting capabilities allow a wider range of applications. Every three lens projector may be either ceiling or floor mounted, front or rear projection. And, an optional Extended Keystone range allows mounting up to 22 degrees off-axis.

Streamlined Setup

All three lens projectors are preset at the factory for the most common source signals. Combined with new EZ Setup Software, this means you'll always enjoy a quicker, easier setup.

Special Applications

HJT three lens projectors excel at a number of specialised applications impossible with fixed matrix displays. Their ability to reshape the raster makes them an outstanding choice for curved screen applications like simulators and domed theatres. Edge Blending capabilities allow seamless panoramas, even a full 360 degree theatre in the round. Special Fast response ILAs and Fast retrace CRTs are available for display of high speed motion. And Colour Matched Optics are an ideal option for side-by-side projector applications

Models 500 International, 400 Europe, 300 North America

Series	**30/30SC**	**40SC**	**60D/60DSC**	**70SC**
Brightness	3000 Centre Full White/ 2500 ANSI Lumens	4200 Centre Full White/ 3700 ANSI Lumens	6000 Centre Full White/ 5200 ANSI Lumens	6800 Centre Full White/ 6000 ANSI Lumens
Contrast	300:1 (1200:1 with SC model)	1200:1	380:1 (1200:1 with SC model)	1200:1
RGB bandwidth	150 MHz at -3dB		100 MHz at -3dB	150 MHz at -3dB
Horizontal frequency	15 - 90 kHz		15 - 65 kHz	15 - 90 kHz
Vertical frequency	45 - 120 Hz			
Aspect ratio	4:3 - 16:9 (variable)			
Blanking	H: < 2.3 micro-sec, V: <500 micro-sec			
Source compatibility (HxV)	2500 x 1340		2500 x 1080	2500 x 1340
Resolution (HxV)	2000 x 1280		1920 x 1080	2000 x 1280
Video resolution	1440 TVL at 4:3 aspect ratio			
Colour	SMPTE 240M			
Convergence	Digital with 30 memories/channels			
Light modulator	3 Proprietary Image Light Amplifiers (100% solid state liquid crystal light valve)			
Power	220 VAC, 20 A, 50/60 Hz 2700 W, 9208 BTUs	220 VAC, 20 A, 50/60 Hz 3325 W, 11,338 BTUs	220 VAC, 30 A, 50/60 Hz 4550 W, 15,525 BTUs	
Light source	1500 W Xenon Arc Lamp	2000 W Xenon Arc Lamp	3000 W Xenon Arc Lamp	
Lamp life (typical)	1800 hours until 85% brightness	2500 hours until 85% brightness	1000 hours until 85% brightness	
Lens options	Fixed: 0.885:1, 2.177:1, 1.5:1, 3:1, 5:1, 7:1, 10:1			
Throw distance	6' - 360' (1.8 m - 110 m)			
Screen size (width)	4' - 118' (1.2 m - 36 m) Optical Capability			
Keystone	±2° (H), ±15° (V) Standard ±15° (H), ±30° (V) with Extended Range Option			
Inputs	2 RGBHV, Decoder Optional			
Communications ports	1 RS-232 port for PC or remote, 1 RS-232 for swither control			
Size (HxWxL)	52.3cm x 69.9cm x 135.6cm (20.6" x 27.5" 53.4")		52.3cm x 85.1cm x 135.6cm (20.6" x 33.5" 53.4")	
Weight	163 kg (360 lbs)		168 kg (369 lbs)	
Operation temperature	10°C - 40°C (50°F - 104°F)			
Included accessories	User's Guide, 1 Projection Lens Set (1.5:1, 3:1, or 5:1), Technicians IR Remote and Cable, Data Setup Restoration Disk, AC Power Cord			
Optional accessories	Auto Setup Tool, Extended Geometry, Board Set, High Speed Option (Fast CRTs/Fast ILAs), Colour Matching, Service Backlit IR Remote, Executive Backlit Remote, 150' Cable for Remotes, Tethered Termaflex Service Remote, Service Manual, plus Lenses (options above), shipping case.			

Brightness and contrast measured at 1024 x 768, 90Hz, 5600K°

ILA-12K 12,000 lumens

12,000 lumens of light output on screens up to 118 feet wide plus vivid colours, sharp contrast and crisp resolution.
The 12K is a brilliant solution for the toughest HDTV, video, graphics or telecined film presentation.display challenges including cinema screening rooms, broadcast studios, outdoor advertising, stadiums, arenas, theme parks, concerts and special events of every kind. It enables effects impossible with lesser projectors.

Industry Leading Performance

You need a truly "great image" to match the phenomenal quality of film. Only the Hughes-JVC ILA-12K delivers all five elements of a great picture simultaneously.

- **Brightness.** The 12K's unprecedented 12,000 lumens deliver truly brilliant, spectacular images, even in the most harshly lit environments, without sacrificing the other elements of a great picture.
- **Resolution.** The 12K displays even the highest resolution graphics and video without down-converting or annoying pixelization, so your audience sees every nuance the original artist intended.
- **Colour.** The 12K's theatrical-grade Xenon Arc Lamp and Precision Optics provide exact control over hue and saturation for a superb range of consistently rich, true colours.
- **Contrast.** High contrast levels reveal fine detail, especially in darker areas of the image, to give the appearance of higher resolution. With a 1000:1 contrast ratio, the 12K's images are always crisp and well defined.
- **Bandwidth.** The 12K's unprecedented high 150 MHz bandwidth lets you see the complete, sharp picture bursting with detail. Low bandwidth causes "fuzzy" pictures which appear to have poor resolution, colour or focus.

Proprietary ILA® Technology

Liquid crystal light valve, coupled to the CRT with a highly refined optics system, delivers lifelike images with an unparalleled combination of brightness, colour, contrast, bandwidth and resolution. Performs far beyond limitations of conventional LCD, CRT and DMD projectors.

High-Resolution, Non-Pixelized Display

The 12K displays images all world standards of video and HDTV, as well as computer signals from data to the highest resolution workstation graphics

- images up to 2000x1280 without down-converting, while graphics enhancement circuitry ensures superb text and graphics reproduction.
- Video is smooth, clean and fluid up to 1440 TV lines of resolution.
- Ultra Digital Processor/Decoder enhances both video and computer presentations, combining a line doubler/line quadrupler, frame doubler and quad standard decoder.
- D1/D5 digital serial interface for the input of direct digital signals at a 10 bit sampling rate
- 10 bit digital gamma circuit for faithful colour reproduction.

Lenses

A huge range of lens sets, from wide angle 0.885:1 to ultra-long throw 10:1 focal lengths, gives you the flexibility to position the projector wherever you want...even up to 360 feet from the screen! Custom Lenses are also available for a wide range of applications.

Cinema Quality Xenon Arc Lamp

The 12K's 7000 Watt Xenon Arc Lamp produces pure white illumination to ensure colour accuracy and saturation as well as a phenomenal 12,000 lumens of light output. The same proven, reliable light source used in motion picture projectors,

- Xenon lamps maintain stable colour temperature in both high and low intensity scenes over the life of the lamp.
- Capability to recover up to 90% of the light lost to lamp decay by means of a simple mechanical adjustment.
- The 12K's patented gimble-mounted lamp module maintains the lamp's ideal vertical orientation throughout the projector's entire ±15 degree tilt range.
- Supercooling of the reflector lowers the arc lamp temperature. Both features help provide even illumination, reduce lamp flicker and contribute to the lamp's long life and lower operating costs.

Cinema Quality Power Supply

The 12K's arc lamp linear power supply is the same proven, reliable unit installed in thousands of motion picture theatres throughout the world. Its isolation from other projector components reduces signal noise and helps ensure a clean, stable picture on the screen.

Cinema Quality Cooling and Filtration Systems

Its thermostatically controlled air cooling system maintains a constant temperature despite variations in room temperature. Separate air handling for the power supply and arc lamp module enhances stability in both areas, preventing hot spots and flicker.

- The 12K's High Efficiency Purified Air filter system is the same technology routinely used in clean-rooms. Its 0.3 micron HEPA filter system blows air across the ILAs, prisms and CRTs to maintain temperature and minimise dust particles on these critical optical components.

Electronic Cinema/Computer Graphics

ILA-12K 12,000 lumens

Easy Setup, Operation and Maintenance

The 12K features a modular design, with field-replaceable circuit boards for ease of service.

- The Arc Lamp is also user-replaceable, with a precision-engineered bayonet socket for easier, faster lamp changes without removing the lamp module from the projector.
- The separate lamp and projector modules are easily detached for shipping and storage.
- Easy entry panels with 1/4 turn fasteners provide quick access to the lamp, power supply, optics and electronics assembly.
- Built-in equipment racks and storage drawers

- All functions, including digital convergence, brightness, colour, contrast, switching, diagnostics and operation can be performed with convenient multi-function remote control.

- Preset at the factory for the most common source signals .
- Programmable settings for dozens of additional sources and screen sizes and store them in projector memory for the next setup.
- Combined with Hughes-JVC's EZ Setup Software it has an ultrafast warmup time of only 15 minutes.

Special Applications

The 12K excels at a number of specialised applications impossible with fixed matrix displays. Its ability to reshape the raster makes it an outstanding choice for curved screen applications like simulators, planetariums and domed theatres. Edge Blending capabilities allow seamless panoramas, even a full 360 degree theatre in the round. Colour Matched optics are an ideal option for applications requiring multiple side-by-side projectors. The 12K may be either ceiling or floor mounted, front or rear projection.

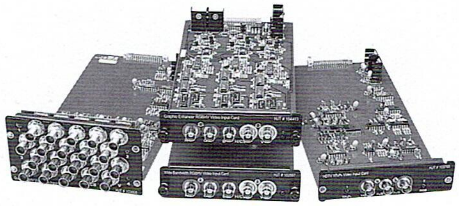
- A tilt adjustment allows the entire projector to be angled ±15 degrees towards the screen. Optional Extended Keystone range provides geometric correction for mounting up to 30 degrees off-axis.
- The 12K's Electronic Cinema Option features fast response ILAs and fast retrace CRTs. This option is especially critical when displaying images with fast motion sequences.

Brightness	Line-doubled Video (31.5 kHz/60 Hz): 12,000 Centre Full White Lumens/8,400 ANSI Lumens Graphics (1024x768/90 Hz): 15,000 Centre Full White Lumens/11,000 ANSI Lumens Frame-doubled Video (64 kHz, 120 Hz): 17,000 Centre Full White Lumens/12,000 ANSI Lumens
Super contrast	Greater than 1000:1
RGB bandwidth	150 MHz at -3dB
Horizontal frequency	15 - 90 Hz
Vertical frequency	45 - 120 Hz
Aspect ratio	1:1 to 2.35:1 (variable), including 5:4, 4:3, and 16:9
Blanking	H: <2.3 µsec, V: <500 µsec
Source compatibility (HxV)	2500 x 1340
Resolution (HxV)	2000 x 1280
Video resolution	1080 TVL at 16:9 aspect ratio, 1440 TVL at 4:3 aspect ratio
Colour	SMPTE 240M
Convergence	Digital with 30 memories/channels
Light modulator	3 Proprietary Image Light Amplifiers (100% solid state liquid crystal light valve)
Power	208 VAC, 60A, 3ø, five wire, 60Hz 12,000 W, 41,000 BTUs
Light source	7000 W Xenon Arc Lamp
Lamp life (typical)	500 hours at 90% brightness
Lens options	Fixed: 0.885:1, 1.5:1, 2.177:1, 3:1, 5:1, 7:1, 10:1
Throw distance	6'-360' (1.8 m - 110 m)
Screen size (width)	4'-118' (1.2 m - 36 m) Optical Capability
Keystone	±2°(H),±15°(V) Standard ±15°(H), ±30°(V) with Extended Range Option
Inputs	RGBHV, Digital Serial 4:2:2, RGB Analog, Composite Video, Y/C, Component. All inputs NTSC, PAL and SECAM
Communications ports	2 RS-232 ports (1 for PC or remote, 1 for switcher control)
Size (H x W x L)	183.7cm x 142.2 cm x 147.3 cm (72.5" x 56" x 58")
Weight	759 kg (1670 lbs) Main cabinet 671 kg (1476 lbs), Lamp Module 88 kg (194 lbs)
Operating temperature	10°C - 40°C (32°F - 104°F) Optimum: 20°C - 30°C (68°F - 86°F)
Accessories included	User's Guide/Service Manual, 1 Projection Lens Set (1.5:1, 3:1, or 5:1), Tethered Termaflex Service Remote, Data Setup Restoration Disk
Optional accessories	Auto Setup Tool, Extended Geometry Board Set, Electronic Cinema Option (Fast CRTs, Fast ILAs), Colour Matching, Projection Lenses (options above)

ILA Projectors

Lenses/Accessories

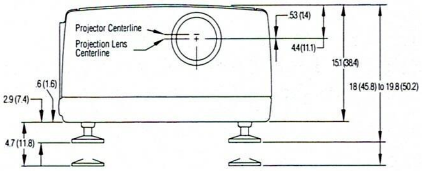
Lenses

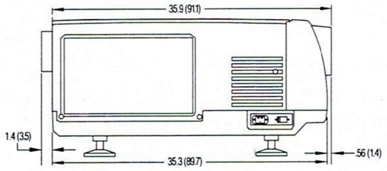


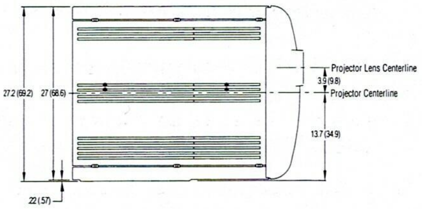
Interface options

Remote controls

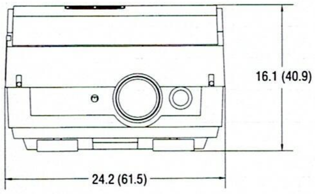
ILA-100 Dimensions (inch:mm)

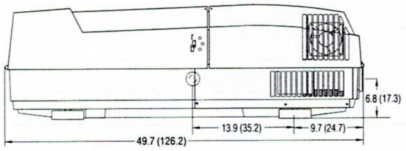

Projector Centerline
Projection Lens Centerline
.53 (14)
44 (11.1)
15.1 (38.4)
18 (45.8) to 19.8 (50.2)
.6 (1.6)
2.9 (7.4)
4.7 (11.8)

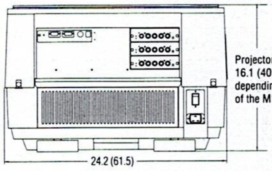

35.9 (91.1)
1.4 (3.5)
35.3 (89.7)
.56 (1.4)


Projector Lens Centerline
3.9 (9.8)
Projector Centerline
27.2 (69.2)
27 (68.6)
13.7 (34.9)
.22 (.57)

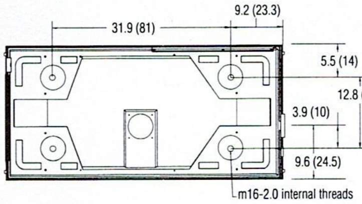
Series 200


16.1 (40.9)
24.2 (61.5)

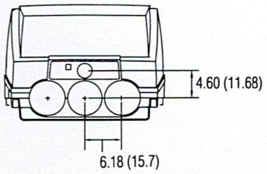

6.8 (17.3)
13.9 (35.2)
9.7 (24.7)
49.7 (126.2)

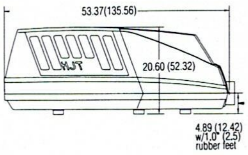


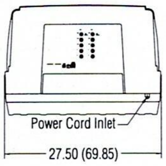
Projector height is
16.1 (40.9) to 18.2 (46.3)
depending on the extension
of the M16 footings.

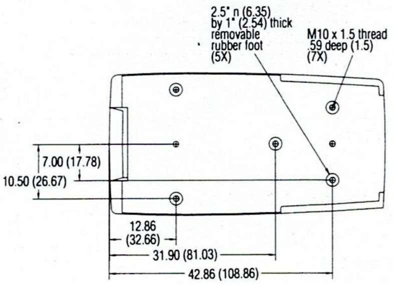

31.9 (81)
9.2 (23.3)
5.5 (14)
12.8 (32.5)
3.9 (10)
9.6 (24.5)
m16-2.0 internal threads

Series 30 and 40

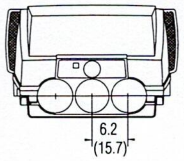

4.60 (11.68)
6.18 (15.7)

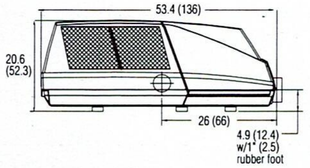

53.37(135.56)
20.60 (52.32)
HJT
4.89 (12.42) w/1.0" (2.5) rubber feet

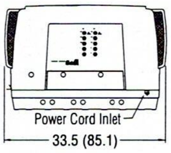

Power Cord Inlet
27.50 (69.85)

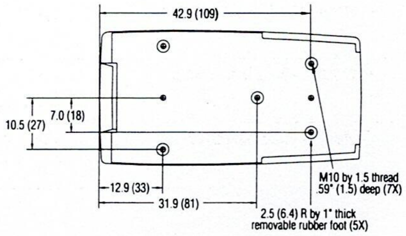

2.5" n (6.35) by 1" (2.54) thick removable rubber foot (5X)
M10 x 1.5 thread .59 deep (1.5) (7X)
7.00 (17.78)
10.50 (26.67)
12.86 (32.66)
31.90 (81.03)
42.86 (108.86)

Series 60 and 70




53.4 (136)
20.6 (52.3)
26 (66)
4.9 (12.4) w/1" (2.5) rubber foot


Power Cord Inlet
33.5 (85.1)


42.9 (109)
10.5 (27)
7.0 (18)
12.9 (33)
31.9 (81)
M10 by 1.5 thread .59" (1.5) deep (7X)
2.5 (6.4) R by 1" thick removable rubber foot (5X)

Storage and Network Systems

CD-ROM Changer

MC-1200E 200 Disc CD Library 91
MC-1600E 600 Disc CD Library 92
MC-2200P/MC-2600P CD Libraries with disc printer 93

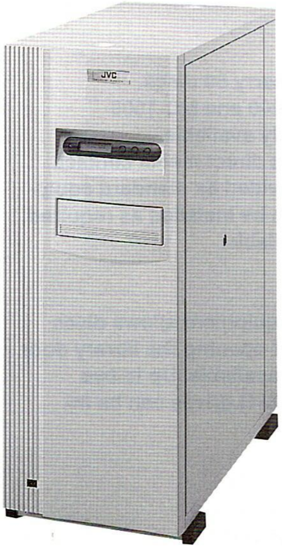
Wireless Infrared LAN VIPSLAN-10

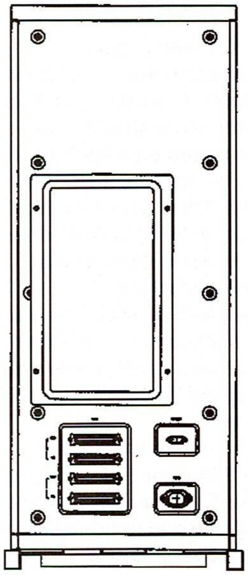
OA-C201U S-satellite (ceiling) 94
OA-C202U W-satellite (wall) 94
OA-M201U M-node 95
OA-M101U Node 95
OA-M202U M-node card (PCMCIA) 95
OA-N101U Station (point to point) 95

CD Library System

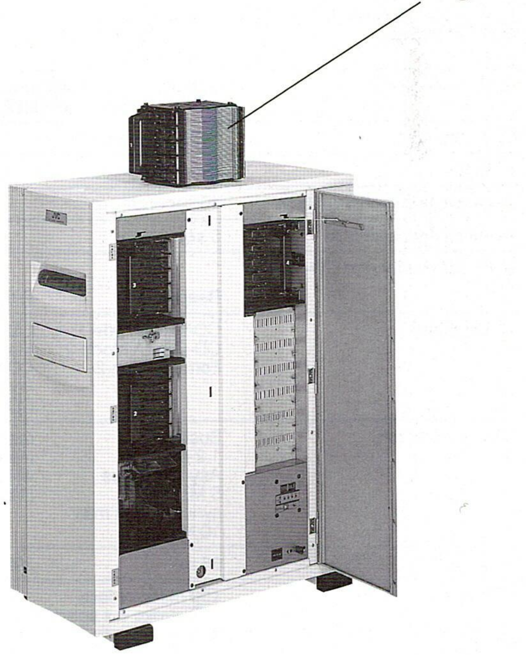
MC-1200E

- 200 CD disc capacity.
- Removable disc magazines each carry 50 discs.
- Magazines usable with both MC-1200 and MC-1600
- Additional magazines are optionally available.
- Tray based disc loading eliminates direct media contact.
- Two 8x-speed CD-ROM drives provided as standard equipment. Up to six of such drives can be installed as required.
- Optional 32x CD-ROM drive is available.
- Easily removable drives.
- SCSI-2 interface
- "Mail slot" provided as standard equipment allows discs to be loaded and unloaded without opening the library door.
- Additional CD-R drives optionally available. Up to two 4x-speed Write, 12x-speed Read CD-R drives can be installed.
- Highly reliable design
  - MSBF over 1,000,000 cycles
  - Air tight cabinet and housing
  - Stable and solid design for recording
  - Guide Rail System for precise changer positioning
- Excellent cost performance
- Easy maintenance
- Diagnostic system using RS-232C for local or remote dial up.
- Extensive manual modes.
- Comprehensive error codes





Number of discs	Up to 200 CD discs (4 removable 50-disc magazines)	
Number of drives	Standard 2 CD-ROM drives (MAX 6 read OR 4 read/2 write)	
SCSI interface	SCSI-2 x 2 standard	
SCSI ID	Individually set for each drive	
Average disc exchange time	8 seconds	
Average disc load time	4 seconds	
CD-ROM reader and CD-R writer		
	Reader	Writer
Media type	CD-ROM Mode 1, CD-DA XA Mode 2: Form 1, Form 2	CD-ROM Mode 1/ Mixed Mode, CD-DA XA Mode 2: Form 1, Form 2, CD-I
Data transfer rate	Sustained 1.2 Mbps 8x Asynchronous 5 Mbps synchronous max 10 Mbps	read: 600 Kbps (Mode 1) 4 x write: 300 Kbps (Mode 1) 2 x
Seek time	95 ms	390 ms
Average access time	150 msec or less (1/3 stroke 8 x speed)	
Block size	2048/512 bytes	2048 bytes (read/write)
Physical characteristics		
Dimensions (W x H x D): [cm]	35.99 x 86.59 x 67.01	
Weight	65.91 kg	
Opening voltage	AC 220 - 240 V, 50/60 Hz	
Power consumption	0.9 A	
Operating temperature	5°C to 35°C (41°F to 95°F)	
Operating humidity	10% to 80%	
Storage temperature	-20°C to 50°C (-4°F to 122°F)	
Storage humidity	10% to 90%	



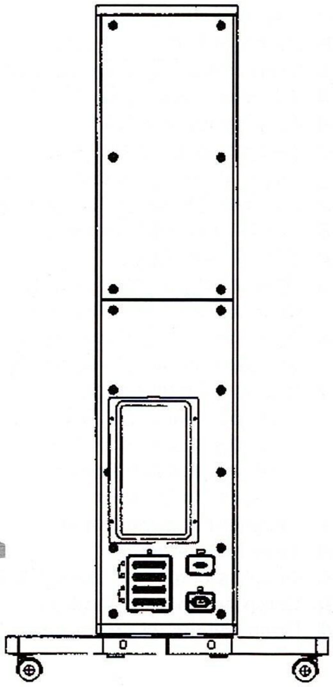
MC-1200E Side View

Optional accessories

MC-M15U	Magazine
MC-D32U	CD-ROM Reader
MC-R14U	CD-R Writer

CD Library System

MC-1600E



- 600 CD disc capacity.
- Removable disc magazines each carry 50 discs.
- Magazines usable with both MC-1200 and MC-1600
- Additional magazines are optionally available.
- Tray based disc loading eliminates direct media contact.
- Two 8x-speed CD-ROM drives provided as standard equipment. Up to six of such drives can be installed as required.
- Optional 32x CD-ROM drive is available.
- Easily removable drives.
- SCSI-2 interface
- "Mail slot" provided as standard equipment allows discs to be loaded and unloaded without opening the library door.
- Additional CD-R drives optionally available. Up to two 4x-speed Write, 12x-speed Read CD-R drives can be installed.
- Highly reliable design
    - MSBF over 1,000,000 cycles
    - Air tight cabinet and housing
    - Stable and solid design for recording
    - Guide Rail System for precise changer positioning
- Excellent cost performance
- Easy maintenance
- Diagnostic system using RS-232C for local or remote dial up
- Extensive manual modes and error codes
- Comprehensive error codes

Number of discs	Up to 600 CD discs (12 removable 50-disc magazines)	
Number of drives	Standard 2 CD-ROM drives (MAX 6 read OR 4 read/2 write)	
SCSI interface	SCSI-2 x 2 standard	
SCSI ID	Individually set for each drive	
Average disc exchange time	10 seconds	
Average disc load time	5 seconds	
CD-ROM reader and CD-R writer		
	Reader	Writer
Media type	CD-ROM Mode 1, CD-DA XA Mode 2: Form 1, Form 2	CD-ROM Mode 1/ Mixed Mode, CD-DA XA Mode 2: Form 1, Form 2, CD-I
Data transfer rate	Sustained 1.2 Mbps 8x Asynchronous 5 Mbps synchronous max 10 Mbps	read: 600 Kbps (Mode 1) 4x write: 300 Kbps (Mode 1) 2x
Seek time	95 ms	390 ms
Average access time	150 msec or less (1/3 stroke 8 x speed)	
Block size	2048/512 bytes	2048 bytes (read/write)
Physical characteristics		
Dimensions (W x H x D): [cm]	34.01 x 164.08 x 67.01	
Weight	108.86 kg	
Opening voltage	AC 220-240 V, 50/60Hz	
Power consumption	0.9 A	
Operating temperature	5°C to 35°C (41°F to 95°F)	
Operating humidity	10% to 80%	
Storage temperature	-20°C to 50°C (-4°F to 122°F)	
Storage humidity	10% to 80%	

Optional accessories

MC-M15U	Magazine
MC-D32U	CD-ROM Reader
MC-R14U	CD-R Writer

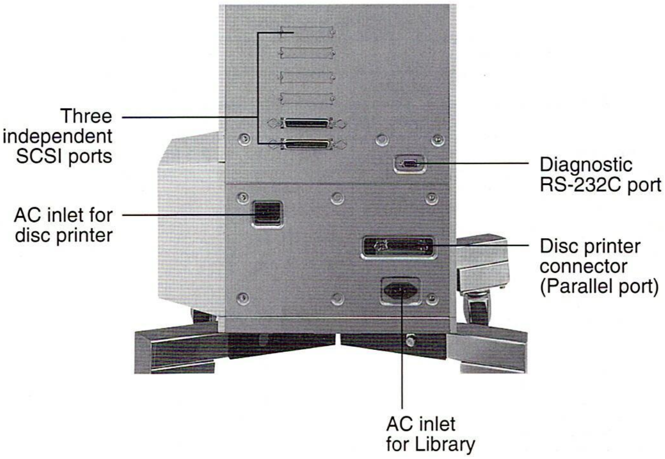
CD Library with Built-in Colour Printer

MC-2200P 200 Disc
MC-2600P 600 Disc

- **Seamless data recording and disc printing**
- **200 and 600 disc capacity models**
- **Tray-based disc-loading eliminates direct media contact**
- **50-disc interchangeable magazines for bulk loading**
- **Mail slot for single disc loading/unloading**
- **Modular component design**
- **Parallel port inkjet colour printer for disc Labelling**
- **Windows NT compatible printer driver software**
- **Three independent SCSI ports**
- **Packet writing capable CD-R drives**
- **DVD upgradable**
- **Up to six drives permanently available**
- **4x speed Write, 12x Read CD-R recording drive**
- **32x speed CD-ROM drive**
- **3.5 second (MC-2200P) and 4.0 second (MC-2600P) disc loading time**
- **Printer resolution 720 dpi**
- **MSBF over one million cycles**
- **Airtight cabinet/housing**
- **Internal air-filtration system**
- **Guide rail system for precise changer positioning**
- **Diagnostic mode for local or remote dial-up (RS-232C) access**

	MC-2200P	MC2600P
General		
Description	200-disc capacity Library with built-in printer	600-disc capacity Library with built-in printer
Number of discs	Up to 200 discs (4 removable 50-disc magazines)	Up to 600 discs (12 removable 50-disc magazines)
Storage capacity	130 GB	390 GB
Drive configuration	Up to 6 drives (players and/or recorders)	
SCSI interface	SCSI-2 (Drives and Robotics)	
SCSI ID	Individually set for each drive and the robotics	
SCSI connector interface	Six 50-pin female centronics	
Average disc loading time	3.5 seconds	4 seconds
Physical Characteristics		
Dimensions (W x H x D)	350 x 866 x 670 mm	777 x 1,640.6 x 807 mm
Weight	66 kg	106 kg
Operationg voltage	120 to 240 V AC, 50/60 Hz	
Power consumption/current	70 W/0.7 A	
Applicable standards	CD, TÜV/GS, UL, CSA and FCC-B	
MSBF	1 million swap cycles	
Environmental Condittions		
Operating temperature	5 °C to 35°C (41°F to 104°F)	
Operating humidity	10% to 80%	
Storage tempearure	-10°C to 40°C (14°F to 104°F)	
Storage humidity	10% to 80%	
Optional CD-ROM player and CD-recorder		
General	CD-ROM	CD-R
Compatible media	CD-DA CD-ROM (Mode 1&2) CD-ROM XA (Mode 1, Form 1&2) Photo CD, CD-I	CD-DA CD-ROM (Mode 1&2) CD-ROM XA (Mode 1, Form 1&2) Photo CD, CD-I (read only)
Data transfer	4,800 KB/s (32x read)	1,800 KB/s (12x read) 600 KB/s (4x write)
Access time	85 ms (CD)	165 ms (CD)
Buffer size	512 KB	1 MB

Printer	
Type	Disc printer
Print method	Parallel colour inkjet printer
Ink	Ink cartridge: BLK/Y/M/C (exclusive)
Resolution	720 dpi
Applicable discs	Printable CD-R media
Driver software	WindowsNT V. 4.0 Service Pack 3 or higher
Interface	Centronics compliant, parallel
Dimensions (W x H x D)	402 x 278 x 175 mm
Weight	7 kg
Power source	120 V to 240 V AC, 50/60 Hz


Three independent SCSI ports
AC inlet for disc printer
Diagnostic RS-232C port
Disc printer connector (Parallel port)
AC inlet for Library

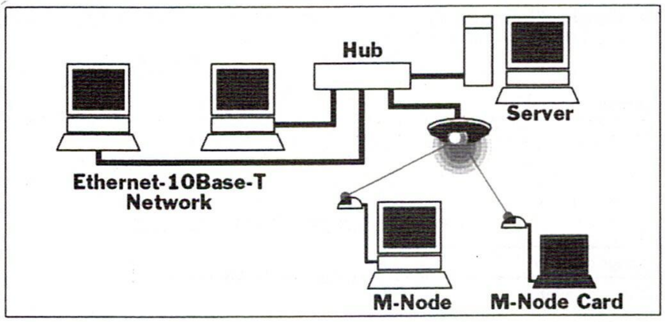
All model numbers, specifications and prices are subject to change without notice.

Infrared Wireless LAN Satellites

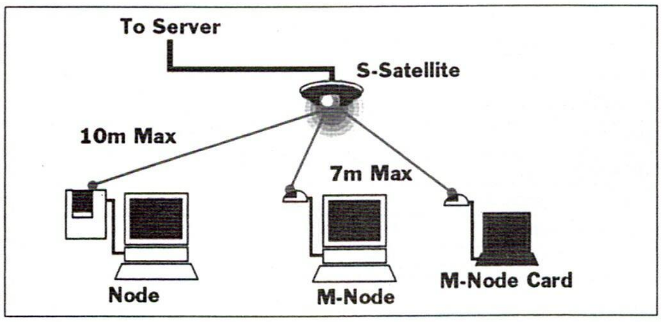
OA-C201U (ceiling) OA-C202U (wall)

S-Satellite (ceiling) and W-Satellite (wall) interface modules

- Satellites are unlimited node wireless / wired Ethernet hubs
- High speed 10 Mbps data throughput
- Full Ethernet IEEE802.3 compliant
- High security, interference-free infrared connection
- 10 metre communications range with standard node
- 7 metre communications range with M-node and M-node card
- Fully compatible with existing VIPSLAN units
- Direct Satellite-Laptop connection with M-node and M-node Card
- Versatility of ceiling or wall installation



Model	OA-C201U	OA-C202U
Name	S-Satellite	W-Satellite
Data throughput	10 Mbps	10 Mbps
Ethernet standard compliance	IEEE802.3 and Ethernet II	IEEE802.3 and Ethernet II
Interface	10 Base-T	10 Base-T
Maximum range	10 m (33') with Node	10 m (33') with Node
	7 m (23') with M-node	7 m (23') with M-node
Current consumption	1.3 A	0.8 A
Power requirement	AC 24 V	AC 24 V
Dimensions (W x H x D)	180 x 180 x 230 mm	222 x 185 x 129 mm
Weight	2.8 kg	2.1 kg

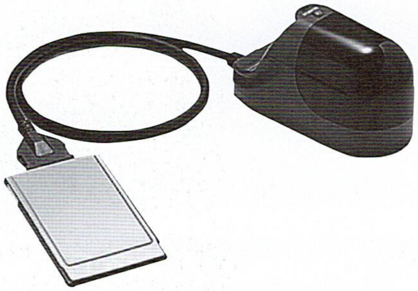


Infrared Wireless LAN Nodes

OA-M201U M-node

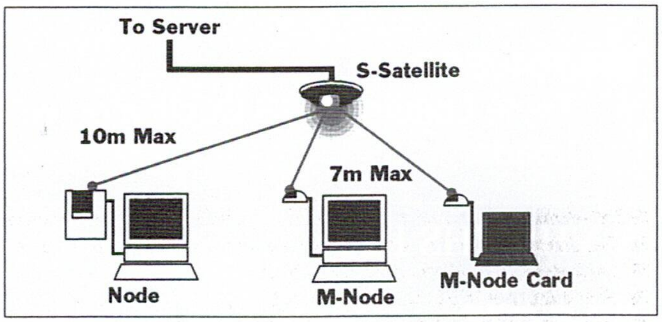
OA-M101U Node/ OA-N101U Station

OA-M202U M-node card



M-Node, Standard node, and PCMCIA M-node card interface modules

- Unlimited number of wireless nodes for wireless / wired Ethernet Satellite ceiling or wall hubs
- High speed 10 Mbps data throughput
- Full Ethernet IEEE802.3 compliant
- High security, interference free infrared connection
- 10 metre communications range with standard node
- Automatic location of nearest satellite

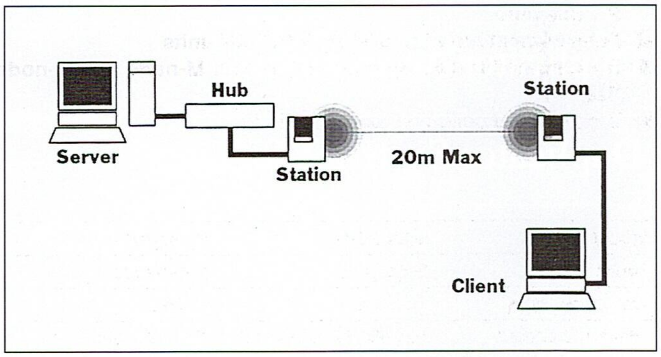


M-node and PCMCIA M-node card

- 75 percent smaller than standard Nodes for increased mobility
- Autolink feature finds nearest satellite within 3 seconds
- Quickshift feature automatically transfers to alternate satellite signal within 1 second if first connection is interrupted
- 7 metre communications range with M-node and M-node card
- Fully compatible with existing VIPSLAN units

PCMCIA M-node card

- Direct Satellite-Laptop connection with M-node card
- Attached Type II PCMCIA card
- M-node card draws power directly from laptop; no external power supply required



Station to Station

- The OA-N101U Station to Station unit can link a remote branch of the network to the hub in a point to point fashion over 20 m
- No Satellite is required.

Model	OA-M201U	OA-M202U	OA-M101U	OA-N101U
Name	M-node	M-node card	Standard Node	Station
Data throughput	10 Mbps	10 Mbps	10 Mbps	10 Mbps
Ethernet standard compliance	IEEE802.3 and Ethernet II	IEEE802.3 and Ethernet II	IEEE802.3 and Ethernet II	IEEE802.3 and Ethernet
Interface	10 Base-T	PCMCIA Type II Card slot	10 Base-T	10 Base-T
Maximum range	7 m (23')	7 m (23')	10 m (33')	20 m (66')
Current consumption	500 mA	600 mA	700 - 1200 mA	700 - 1200 mA
Power requirement	DC 5 V	DC 5 V	DC 7 - 9 V	DC 7 - 9 V
Dimensions (W x H x D)	56.8 x 105 x 61.2 mm	56.8 x 105 x 61.2 mm	171.5 x 152.4 x 209.6 mm.	Same as M101U
Weight	150 g	180 g	910 g	910 g

Duplication Systems

VHS Hi-Fi

BR-S7020ED/EP
Double Loading Duplicator 97

SA-K725U
Quality Control System, Duplication Verifier 98

BR-7040EDB
Triple Loading VHS Duplicator w/ Auto Cassette Loader 100

S-VHS/VHS Hi-Fi

BR-S777E
Hi-Fi Triple Loading VHS/S-VHS Duplicator 101

Duplicator Accessories 102

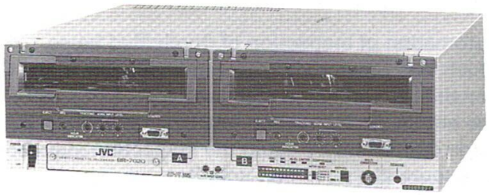
Duplicator System Diagrams 103

2 in 1 Hi-Fi VHS Duplicator

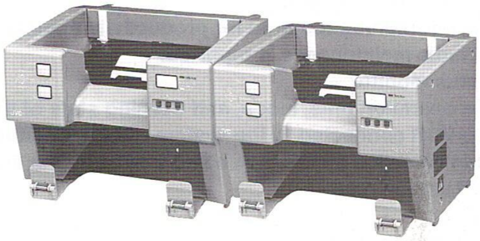
BR-7020ED (PAL/SECAM) REC ONLY
BR-7020EP (PAL)

- **2 in 1 cost-saving design**
- **High quality pictures and sound**
- **Improved reliability and durability**
- **Auto-loading capability for improved productivity (with SA-L50U)**
- **Improved serviceability with removable and digital self-diagnostics**
- **Internal 8-digit ID code recording system with external ID code input capability**
- **Hi-Fi audio with dynamic range of 87 dB**
- **Separate input terminals for Hi-Fi and normal audio**
- **Switchable audio limiter**
- **Independent level controls for each normal audio channel**
- **3-Colour LED hour meter indicator**
- **Dolby*B noise reduction for normal audio**
- **RCA serial remote control in/out loop-through connectors**
- **REC/WARNING indicators**
- **Warning output connector**
- **Multi-display unit (optional SA-K723U)**
  - **Connectable to the front panel**
  - **Remote control (1 VTR only)**
  - **Audio VU level meters**
  - **Digital 99,900-hour meter**
  - **ID code generator for ID code input**
  - **ID code reader**
- **Record and Playback PAL with BR-7020EP**

* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation "Dolby" and the Double-D symbol are trademarks of Dolby Laboratories Licensing Corporation



BR-7020ED / EP



Optional SA-L50U

Remote Controller Required

GENERAL

Format
BR-7020EP VHS PAL (SP only)
BR-7020ED VHS PAL/SECAM (SP only)

Tape width: 12.65 mm (1/2 inch)

Tape speed: 23.39 mm/sec

Recording/playback time: 180 min. (with E-180 video cassette)

FF/REW time: Less than 4.0/3.0 min. (with E-180 video cassette)

Operating temperature: 5° to 40°C

Storage temperature: –20°C to 60°C

Operating humidity: 30% to 80%

Power consumption:
BR-7020ED : 37 W (48 W with Remote Controller, Display and Loader)
BR-7020EP : 42 W (52 W with Remote Controller, Display and Loader)

Power requirement: 220 — 240 V AC, 50/60Hz

Dimensions: 500 (W) × 155 (H) × 429 (D) mm with foot pads

Weight: 18 kg

VIDEO

Recording system: Rotary two-head helical scan system
Luminance: FM recording
Colour: Down-converted dirct recording

Video signal system: PAL colour signal (BR-7020/ED/EP)
SECAM colour signal (BR-7020ED)

Input: 0.5 to 2.0 Vp-p, 75 ohms, unbalanced, BNC

Output: 1.0 Vp-p, 75 ohms, unbalanced, BNC

Horizontal resolution: 250 lines (colour, PAL)/240 lines (colour, SECAM)

Signal-to noise ratio: 44 dB (colour, PAL)/43 dB (colour, SECAM)

AUDIO

Input: -6 dBs, 50 k-ohms, unbalanced, RCA (Hi-Fi/Normal)

Output: -6 dBs, 1 k-ohm, unbalanced, RCA (Hi Fi/Normal)(SR-7020EP only)

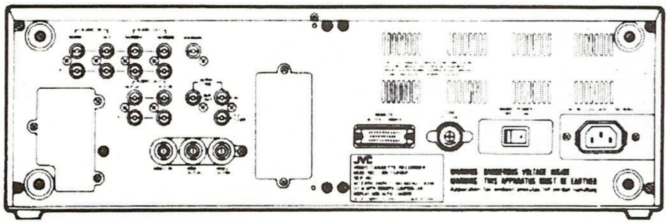
Signal-to-noise ratio: 42 dB (Normal: NR-off, at 3 % distortion)

Frequency response: 20 to 20,000 Hz (Hi-Fi)
40 to 12,000 Hz (Normal)

Wow and flutter: 0.006 % wrms (Hi-Fi)
0.2 % wrms (Normal)

Dynamic range: 87 dB (Hi-Fi)

BR-7020EP



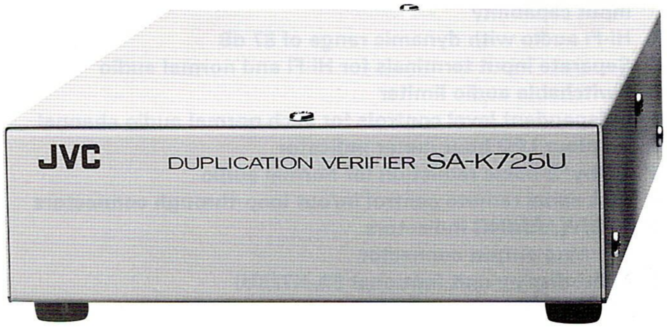
All model numbers, specifications and prices are subject to change without notice.

Duplication Verifier (BR-7020EP Accessory)

SA-K725U

The SA-K725U can be combined with a JVC VCR BR-7020EP to build an automatic offline QC system

- **Automation of inspection of duplicated tapes which was previously performed visually, in the QC process**
- **Consistent evaluation standard**
  The automatic inspection and evaluation standard can be made consistent by using the inspection standard and procedure stored in non-volatile memory.
- **Customisable inspection standard and procedure**
  The inspection standard and procedure can be changed or set to suit the video software or meet the needs of the customer. At the same time, the procedure can be stored in non-volatile memory.
- **Evaluation result report**
  The information required for productivity management and periodic maintenance is reported.
- **Status monitor**
  The operation time, mode, and warning state of the duplication VCR connected to the system can be monitored. The ID code recorded on the tape being played by the duplication VCR can be read.



- **Inspection items**
  - **This section introduces all the items that can be inspected when test signals for quality control are recorded on tapes by the slave VCR. Unnecessary inspection items can be omitted.**
  - **Recommended test signals**
    Video signal: Signal containing low-frequency chroma, such as colour bars
    Audio signal: 1-kHz single frequency from audio signal generator
  - **As well as the inspection items, the information required for productivity management and periodic maintenance is provided.**

Note: The functions and features of the automatic QC system containing the SA-K725U depend on the software and system configuration. Ask your dealer for details.

Inspection item	Evaluation standard
Video RF level	By the specified level
Low-frequency chroma	Low-frequency chroma presence
Playback video signal synchronization	Synchronization presence
Video dropout	By the specified level
Hi-Fi audio RF level	By the specified level
Hi-Fi audio level	By the specified level
Hi-Fi audio dropout	By the specified level
Normal audio level	By the specified level
Tracking shift	By the specified level

Monitor item	Remarks
ID of tape to be inspected	Slave VCR ID
VCR ID for quality control	
VCR status for quality control	Mode warning state
VCR operation time for quality control	

GENERAL	
Power supply:	12 V DC
Power consumption:	1.3 W
Dimensions:	150 (W) × 5.2 (H) × 23.7 (D) mm
Weight:	1.4 kg (net): 1.8 kg (with the box)
Permissible operating temperature:	5°C to 40°C
Permissible operating humidity:	30% to 80% RH
Permissible storage temperature:	–20°C to 60°C

VIDEO SIGNAL SYSTEM	
Signal input:	0.5 to 2.0 Vp-p, 75 ohms, unbalanced BNC
AUDIO SIGNAL SYSTEM	
Signal input:	–6 dBs, 60 kohms, unbalanced RCA
SERIAL SIGNAL SYSTEM	
RS-232C (excluding connectors):	RCA

Automatic Offline QC System Configuration

This system provides compatible playback verification required for quality control of duplicated tapes.

PRODUCTS REQUIRED FOR SYSTEM CONFIGURATION (Per BR-7020EP)

	Model name	Quantity	Remarks
1	BR-7020EP	1	
2	SA-K725U	1	Evaluation equipment
3	SA-K721U	1	Automatic QC system board
4	Personal computer with a display	1	
5	Software reguirement	1	Windows '95 or later
6	BNC-BNC	2	For video signal output
7	RCA-RCA (stereo)	2	For Hi-Fi audio output
8	9PIN-RCA x2	1	For RS-232C

* The customer should obtain items 4, 6, 7, and 8.
* Ask your dealer for details of software.

SYSTEM CONFIGURATION AND CONNECTION

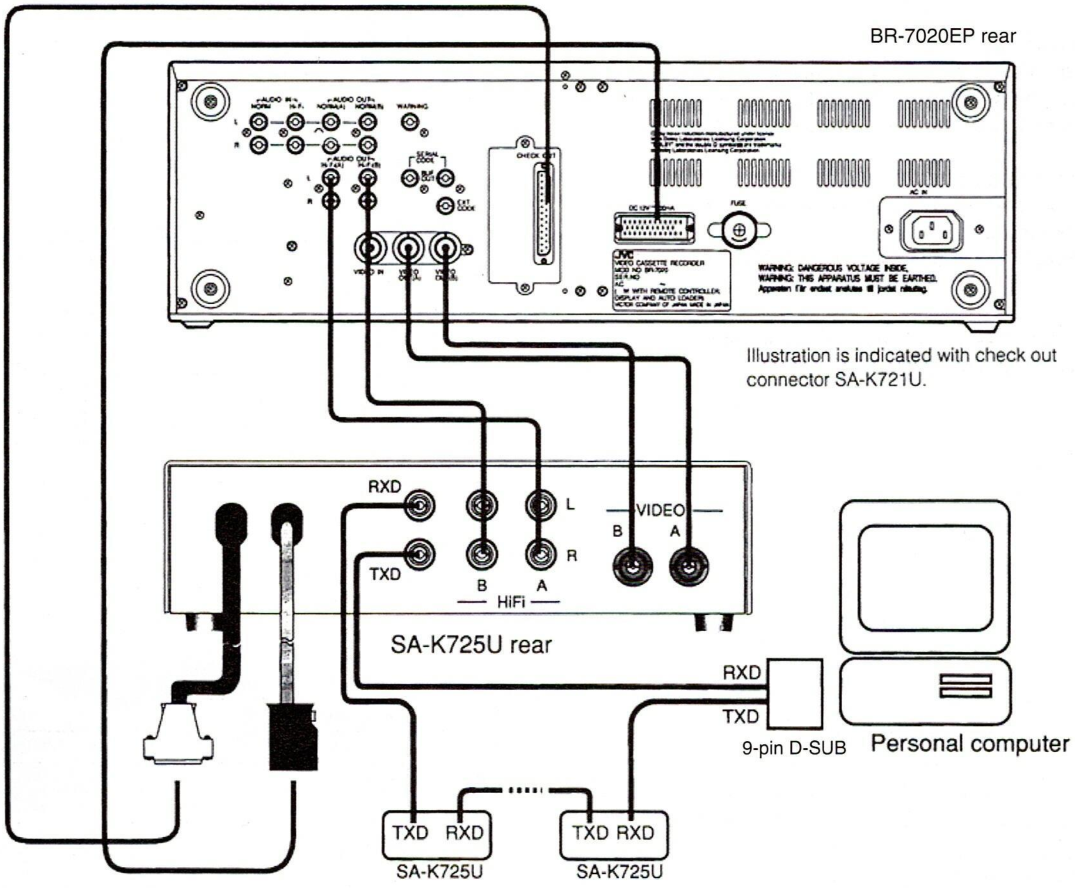

BR-7020EP rear
RXD
TXD
L
R
B
A
HiFi
VIDEO
B
A
SA-K725U rear
RXD
TXD
9-pin D-SUB
Personal computer
TXD RXD
SA-K725U
TXD RXD
SA-K725U

Illustration is indicated with check out connector SA-K721U.

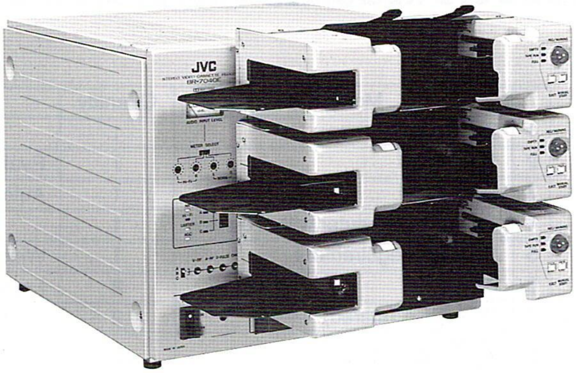
3 in1 Hi-Fi VHS Duplicator

BR-7040EDB (PAL/SECAM) REC ONLY

- **VHS PAL/SECAM dual recording capability**
- **3 in1 Hi Fi VHS Duplicator with optional auto cassette loaders**
- **Four-way cost savings (in space, energy, peripheral equipment costs, and labour)**
- **Hi-Fi audio with dynamic range of 87 dB**
- **Dolby* B noise reduction for normal audio**
- **RCA serial code remote control IN/OUT loop-through connectors**
- **Audio input level meter**
- **Built-in self-diagnostic warning system**
- **Three 5000-hour meters**
- **Independently replaceable recording units**
- **Front panel test points with recorder unit selectors**
- **Automatic head cleaning mechanism**
- **The optional SA-K14U ID code board**

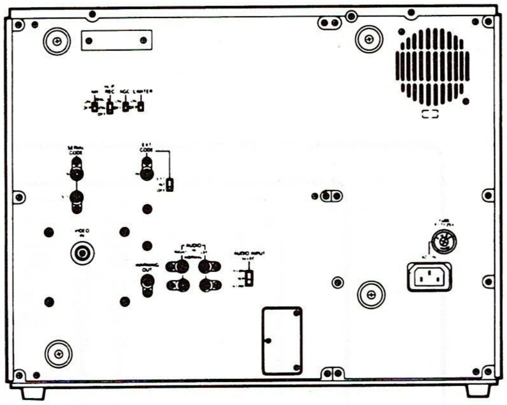
* VIDEO & AUDIO specifications are based on playback by a standard player/recorder.

* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation "Dolby" and the Double-D symbol are trademarks of Dolby Laboratories Licensing Corporation DOLBY B NR



Picture shows BR-7040EDB with optional SA-L30U auto cassette loaders

Remote Controller Required



GENERAL

Format: VHS PAL/SECAM (SP only)

Tape width: 12.65 mm (1/2 inch)

Tape speed 23.39 mm/s

Recording time: 180 minutes with E-180 cassette

Fast forward/rewind time: 4.5 min. for 180 min. tape

Operating temperature: 5°C to 40°C

Storage temperature: –20°C to 60°C

Ambient humidity: 30% to 80%

Power consumption: 64 watts (with loader)

Power requirement: 220-240 V AC~ 50/60 Hz

Dimensions: 430 (W) x 395 (H) x 675 (D) mm (with loaders and video cassettes)
430 (W) x 345 (H) x 485 (D) mm (without loaders)

Weight: 36 kg (80 lbs) (with loaders)

VIDEO

Recording system: Totary two-head helical scanning system
Luminance: FM recording
Colour: Down-converted direct recording

Video signal system: PAL/SECAM type Colour Signal

Input: 0.5 to 2.0 Vp-p. 75 ohms. unbalanced, BNC

Signal-to -noise ratio: 43 dB (Colour, PAL)
45 dB (Monochrome, PAL/SECAM)

Horizontal resolution: 240 lines (Colour, PAL)
230 lines (Colour, SECAM)

AUDIO

Input level (line): –6 dBs, 10 k-ohms, unbalanced (Hi-Fi/Normal), RCA

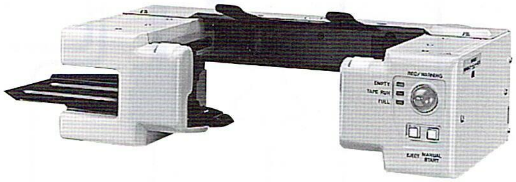
Signal-to noise ratio: 42 dB (NR-off, at 3% distortion)

Frequency response: 20 to 20,000 Hz (Hi-Fi)
40 to 12,000 Hz (Normal)

Wow and flutter: Less than 0.006% wrms (Hi-Hi) Less than 0.2% wrms (Normal/Self-recording & PB)

Dynamic range: 87 dB (Hi-Fi)

* VIDEO & AUDIO specifications are based on play back by a standard player/recorder.



SA-L30U
Auto Cassette Loader
for BR-7040EDB

3 in 1 Hi-Fi S-VHS Duplicator

BR-S777E REC ONLY

S-VHS 625 VHS PAL

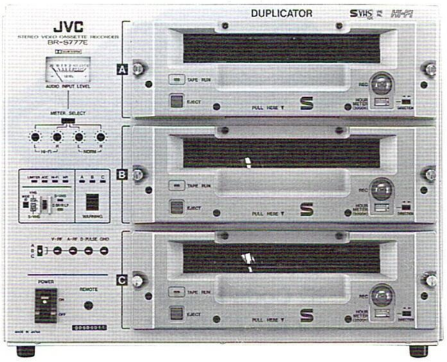
- **The world's first multi-chassis professional S-VHS duplicator**
- **3 in1 design for three-way savings (in space, energy, and peripheral equipment costs)**
- **High S-VHS picture quality***
- **S-VHS SP/S-VHS LP/VHS SP recording capability**
- **Hi-Fi audio with dynamic range of 87 dB**
- **Dolby* B noise reduction for normal audio**
- **Built-in 8-digit ID code generator and the optional external code generator**
- **RCA serial remote control IN/OUT loop-through connectors**
- **Audio input level meter**
- **Built-in self-diagnostic warning system**
- **Three large REC indicators**
- **Three 5000-hour meters**
- **Independently replaceable recording units**
- **Front panel test points with recorder unit selectors**
- **Automatic head cleaning mechanism**

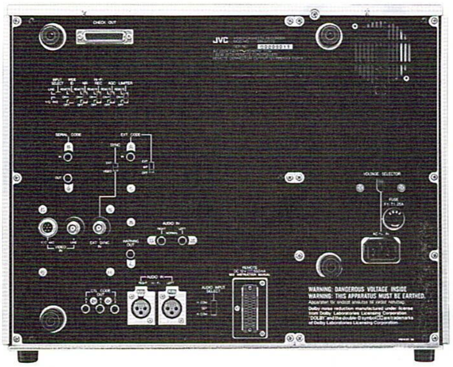
* VIDEO & AUDIO Specifications (except wow and flutter) are based on playback with a standard player/recorder in the SP mode.

* A Y/C filtering technique incorporated under license from FAROUDJA Laboratories Inc.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation "DOLBY" and the double-D symbol DOLBY B NR are trademarks of Dolby Laboratories Licensing Corporation.

Remote Controller Required





GENERAL

Format: S-VHS Europe standard (SP/LP)/VHS PAL (SP only)

Tape width: 12.65 mm (1/2 inch)

Tape speed: 23.39 mm/s (SP mode)

Recording time: 180 min. with SE-180 cassette

Fast forward/Rewind time: 4.5 min. for 180 min. tape

Operatiang temperature: 5°C to 40°C

Storage temperature: –20°C to 60°C

Ambient humidity: 30% to 80%

Power consumption: 70 watts

Power requirement: 220-240 V AC ~ 50/60 Hz

Dimensions: 430 (W) x 345 (H) x 485 (D) mm

Weight: 30 kg

VIDEO

Recording system: Rotary four-head, helical scanning system
Luminance: FM recording
Colour: Down-converted direct recording

Video signal system: PAL-type Y/C and PAL-type colour signals

Input (line): 0.5 to 2.0 Vp-p, 75 ohms, unbalanced, BNC

Input level (Y/C):
Y: 0.5 - 2.0 Vp-p, 75 ohms, unbalanced
C: 0.3 Vp-p, 75 ohms, unbalanced (Burst)

Signal-to-noise ratio: 43 dB (Colour, VHS SP)
44 dB (Colour, S-VHS SP)
41 dB (Colour, S-VHS LP)

Horizontal resolution: 250 lines (VHS/Colour)
400 lines (S-VHS/Colour)

AUDIO

Input level (line): –6 dBs, 10 k-ohms, (balanced/Hi-Fi unbalanced/Normal)

Signal-to-noise ratio: 42 dB (NR-off, at 3% distortion)

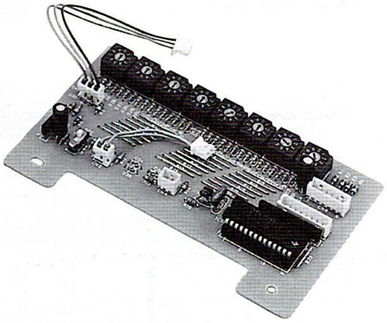
Frequency response: 20 to 20,000 Hz (Hi-Fi)
40 to 12,000 Hz (Normal)

Wow and flutter: Less than 0.006% wrms (Hi-Fi)
Less than 0.2% wrms (Normal/Self-recording & PB)

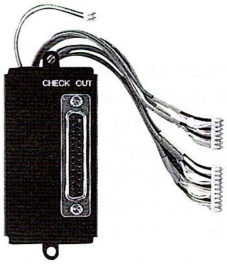
Dynamic range: 87 dB (Hi-Fi)

* VIDEO & AUDIO Specifications (except wow and flutter) are based on playback with a standard player/recorder in the SP mode.

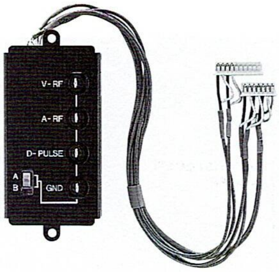
Duplicator Accessories



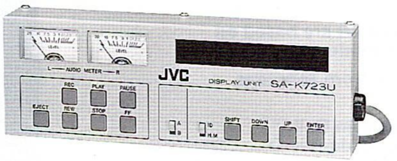
SA-K14U
ID Code Board
for BR-7040EDB



SA-K721U
Automatic QC Connector
for BR-7020ED/EP

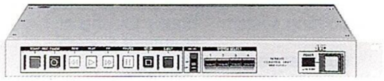

V-RF
A-RF
D-PULSE
A
B
GND

SA-K722U
Test Point Unit
for BR-7020ED/EP


AUDIO METER
JVC
DISPLAY UNIT SA-K723U
REC
PLAY
PAUSE
EJECT
REW
STOP
FF
SHIFT
DOWN
UP
ENTER

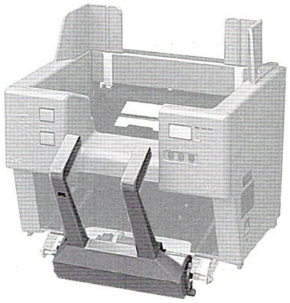
SA-K723U
Multi-Display Unit
for BR-7020ED/EP

SA-L50U
Auto Cassette Loader
for BR-7020ED/EP

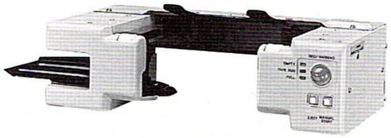


RM-G77U
Serial Remote Control Unit
Control up to 200 ×
BR-7040EDB
BR-S777E/BR-7020ED/EP

RM-G30U
Serial Remote Control Unit
Control up to 10 ×
BR-7040EDB
BR-7020ED/EP/BR-S777E



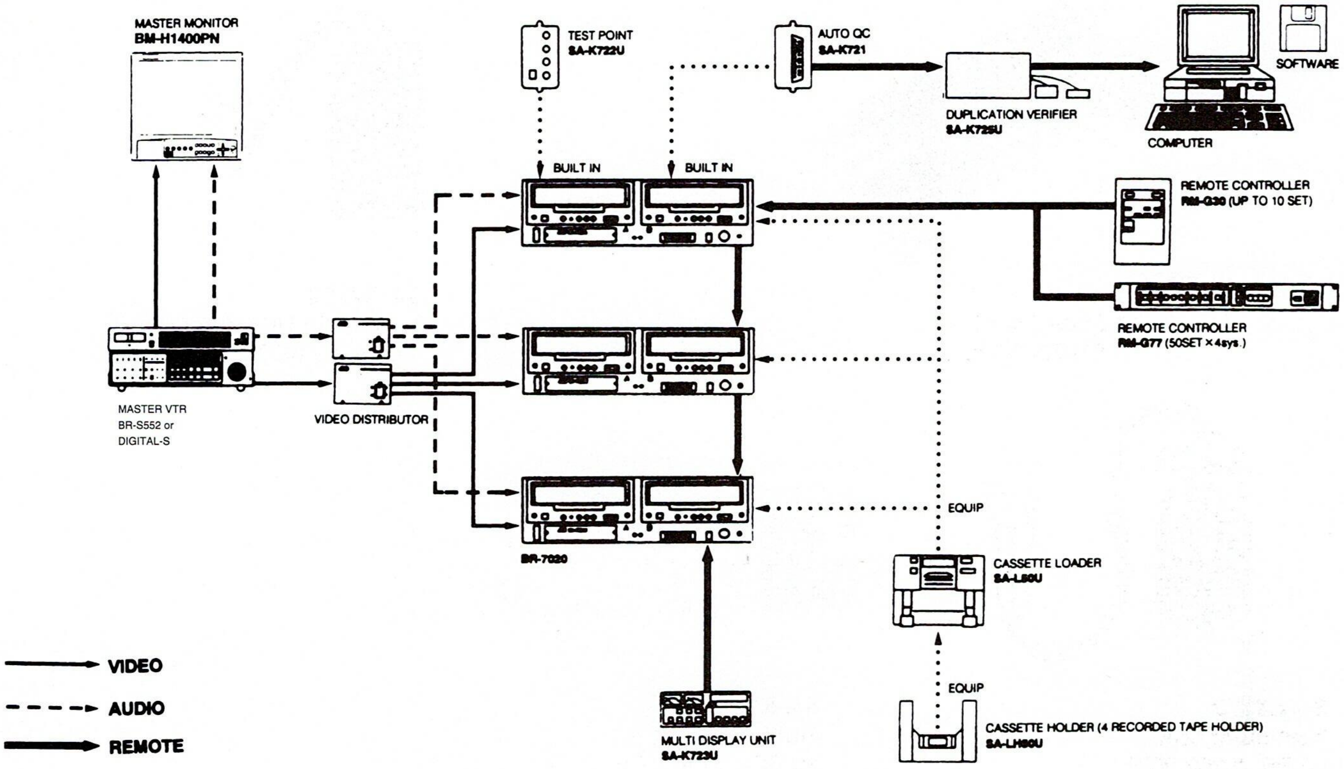
SA-LH50U
Cassette Holder of
SA-L50U



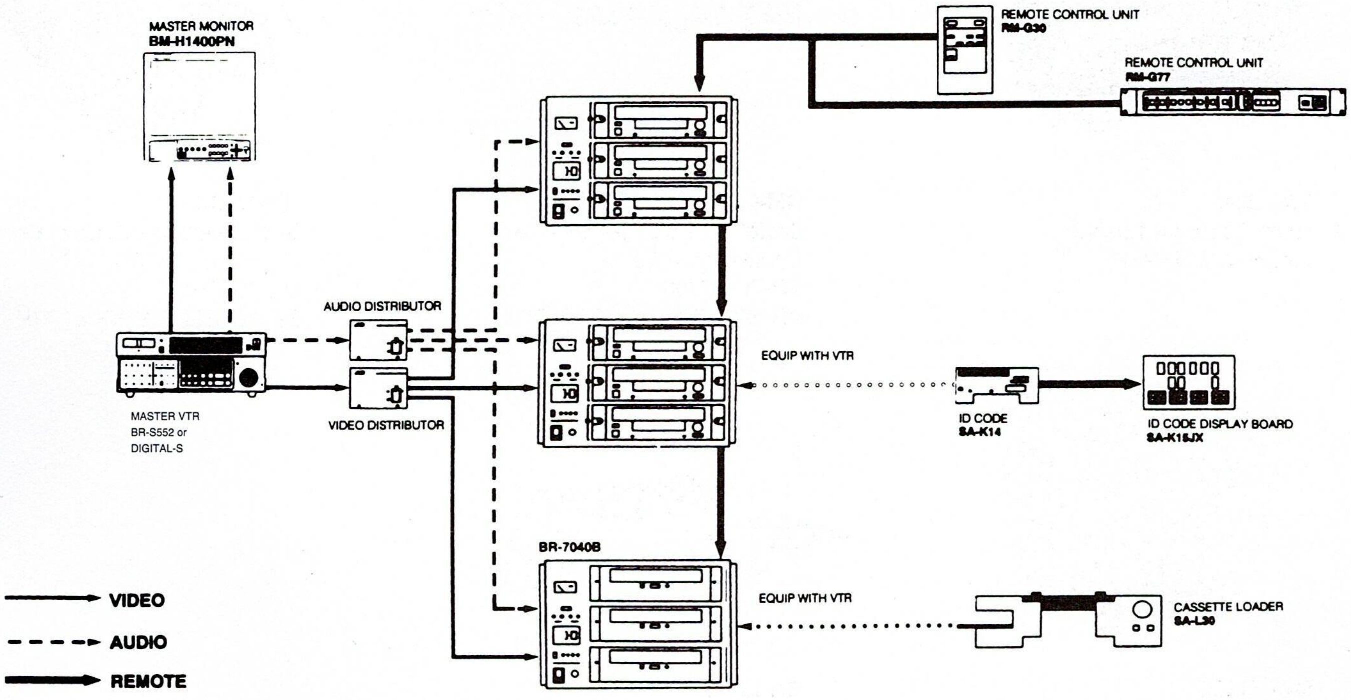
SA-L30U
Auto Cassette Loader
for BR-7040EDB

Duplicator Systems

2 in 1 APPLICATIONS (BR-7020EP)


MASTER MONITOR
BM-H1400PN
TEST POINT
SA-K722U
AUTO QC
SA-K721
DUPLICATION VERIFIER
SA-K725U
SOFTWARE
COMPUTER
BUILT IN
BUILT IN
REMOTE CONTROLLER
RM-G30 (UP TO 10 SET)
REMOTE CONTROLLER
RM-G77 (50SET × 4sys.)
MASTER VTR
BR-S552 or
DIGITAL-S
VIDEO DISTRIBUTOR
EQUIP
BR-7020
CASSETTE LOADER
SA-L60U
EQUIP
MULTI DISPLAY UNIT
SA-K723U
CASSETTE HOLDER (4 RECORDED TAPE HOLDER)
SA-LH60U
VIDEO
AUDIO
REMOTE

3 in 1 APPLICATIONS (BR-7040, BR-S777E)


MASTER MONITOR
BM-H1400PN
REMOTE CONTROL UNIT
RM-G30
REMOTE CONTROL UNIT
RM-G77
AUDIO DISTRIBUTOR
EQUIP WITH VTR
MASTER VTR
BR-S552 or
DIGITAL-S
VIDEO DISTRIBUTOR
ID CODE
SA-K14
ID CODE DISPLAY BOARD
SA-K15JX
BR-7040B
EQUIP WITH VTR
CASSETTE LOADER
SA-L30
VIDEO
AUDIO
REMOTE

CCTV Systems

Colour Cameras

1/2″ CCD Digital Signal Processing

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1/3" CCD

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Black and White Monitors 72
Colour Monitors 65

1/2" CCD RS-422A Control DSP Colour Camera

TK-C1360E/C1360BE 24 V AC/12 V DC

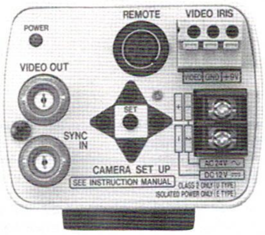
- 1/2 inch IT CCD (440k pixels)
- 470 TV Lines resolution
- Signal to noise ratio of 48 dB
- 0.95 lux minimum illumination with normal shutter (at F1.2, 25 percent, AGC on)
- Captures sharp images down to 0.03 lux with slow shutter (at F1.2, 25 percent, AGC on) thanks to frame integration
- Digital signal processing (DSP) adjusts to deliver top quality pictures under difficult operating conditions:
  Automatic shutter from 32/50 to 1/100,000 sec
  3-D Auto white balance
  Highlight inversion
  Backlight compensation (BLC)
  Dual edge 2H detail enhancement
- RS-422A control
- Simple menu controls wide range of settings, manually or via computer control
- Camera ID overlay for multi-camera surveillance
- C or CS lens mount capability
- Compact size, ruggedly built
- Minimal weight just 640 g
- Two way power supply; AC 24 V, DC 12 V

TK-1360E
- VBS output

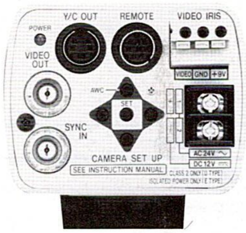
TK-1360BE
- Y/C output
- One push auto white balance (AWC)

JVC
TK-C1360
COLOR VIDEO CAMERA
DIGITAL
1/2 INCH CCD

Shown with optional lens



TK-C1360E



TK-C1360BE

Image device	1/2" Interline transfer (IT) CCD
Effective picture elements	440K (752 (H) X 582 (V))
Video process circuit	DSP
Sync system	Internal, Line lock, External (Full genlock)
Sync input	BB or VBS
Video output	VBS, 1360BE : Y/C (S terminal, 4-pin)
Signal to noise ratio	48 dB
Horizontal resolution	470 TV lines
Minimun required illumination	0.95 lux (F1.2, normal shutter) 0.03 lux (F1.2, slow shutter)
Electronic shutter	Normal, 1/120, 1/250, 1/500, 1/1000, 1/ 2000, 1/4000, 1/100,000 second, automatic electronic shutter, slow shutter
Slow shutter	2/50, 4/50, 8/50, 16/50, 32/50 second
Automatic electronic shutter	32/50 to 1/100,000 second
White balance	3 dimensional detection Auto Tracing White (ATW), Manual (Biaxial)

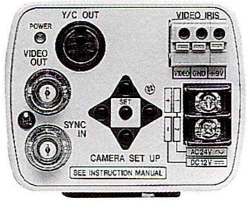
Backlight compensation (BLC)	On/off, Multi-data detect BLC (6 patterns)
Lens mount	C or CS
Automatic gain control (AGC)	Off, +9 dB, +18 dB, Super AGC
Setup menu	Sync select, phase control, chroma level, chroma phase, brightness, detail enhancement, AGC select, shutter speed, BLC, white balance selection and control, Highlight inversion, gain on/off/up, camera ID
Remote control input	8-pin miniature round connector; RS-422A (4 wire to duplication)
Power requirement	AC 24 V (50/60 Hz), DC 12 V
Power consumption	Approx. 440 mA at AC 24 V (6.6 W) Approx. 550 mA at DC 12 V (6.6 W)
Operating temperature range	-10°C to 50°C (14°F to 122 °F)
Dimensions (W x H x D)	70 x 67 x 159 mm
Weight	640 g (1.41 lbs.)

1/2" CCD Multi-Purpose Colour Camera

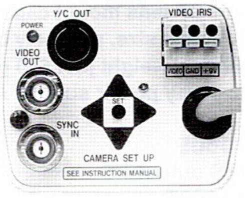
TK-C1380E 24 V AC / 12 V DC
TK-C1381EG 230 V AC

- 1/2-inch Interline Transfer (IT) CCD
- Digital Signal Processor (DSP)
- INTERNAL, External (Full genlock) and line lock system
- Contour correction
- ID capability
- Three-dimensional Detect ATW (Auto Tracking White Balance)
- AGC (Automatic Gain Control) boosts sensitivity below preset light levels
- Wide-range Automatic Electronic Shutter
- Y/C Output Connectors
- Easy Menu-driven Parameter Setting
- High-light inverter function
- Backlight Compensation
- C/CS Mount
- AC/DC Power Suppply

JVC
TK-C1380
COLOR VIDEO CAMERA
BF LOCK
DIGITAL
1/2 INCH CCD
NEAR
FAR
ALC
LEVEL


Y/C OUT
VIDEO IRIS
POWER
VIDEO OUT
SYNC IN
SET
CAMERA SET UP
SEE INSTRUCTION MANUAL
VIDEO
GND
+9V
AC24V
DC12V

TK-C1380E
24 V AC / 12 V DC


Y/C OUT
VIDEO IRIS
POWER
VIDEO OUT
SYNC IN
SET
CAMERA SET UP
SEE INSTRUCTION MANUAL
VIDEO
GND
+9V

TK-C1381EG
230 V AC

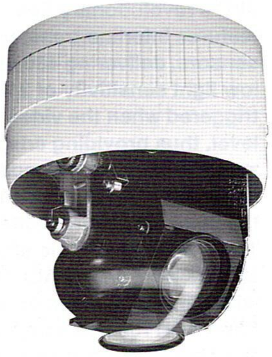
Signal system:	Based on PAL standard
Image device:	1/2" single CCD
Pickup element:	IT (interline-Transfer) system CCD solid-state image sensor (with complementary colour filter: Ye-Cy-Mg-Gr)
Effective picture elements:	752 (H) x 582 (V)
Video process circuit	Built-in DSP (9 bits)
Sync system:	Internal, External (Full genlock), Line lock
Sync input:	BB or VBS (BNC)
Video output:	VBS (BNC), Y/C (S terminal, 4-pin)
Video S/N:	More than 48 dB
Horizontal resolution:	470 TV lines
Minimum required illumination:	0.95 lux (F1.2)
Electronic shutter:	Normal, 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 sec., or automatic electronic shutter iris mode
Automatic electronic shutter:	1/50 – 1/100,000 sec.
White balance:	3 dimension detect ATW, Manual (Biaxial)
BLC:	ON/OFF, multi-data detect BLC (6 patterns)
Lens mount:	C/CS mount
AGC:	ON/OFF (9 dB/18 dB)
Special set-up menu:	CONTOUR level, ENHANCE level, PED level, HUE and IRIS level
Power requirement:	TK-C1380E: AC 24 V (50/60Hz, DC 12 V TK-C1381EG: AC 230 V (50/60Hz)
Power consumption:	TK-C1380E: 380 mA at AC 24 V (5.6 W) 470 mA at DC 12 V (5.6 W) TK-C1381EG: 60 mA (5.6 W)
Operating temperature range:	–10°C to 50°C (14°F to 122°F)
Weight:	TK-C1380E: 640 g, TK-C1381EG: 880 g
Cable length:	TK-C1381EG: approx. 2.4 m

Presettable Dome Colour Camera

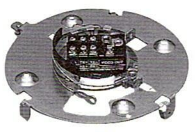
TK-C675E/EK

- 64 pre-settable positions
- Large aperture lens and highly sensitive CCD; minimum illumination 2.8 lux
- High quality optical distortion compensating dome cover
- 16X 4.5 to 72 mm zoom ratio; F 1.2 at wide angle
- Maximum 2 second zoom speed
- Wide coverage angle; Horizontal 3.8 to 56 degrees, vertical 2.9 to 44 degrees
- 360 degree endless panning
- Maximum 240 degree/second panning speed
- Auto panning function
- 180°C Auto Flip flips the camera over by 90 degrees at the tilting limit so that tilting can continue.
- One-touch auto focus capability
- RS-422A/RS-485 control for point to point and multi-drop control with one controller.
- Machine ID for 32 cameras

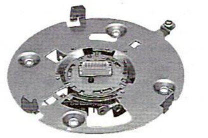
Ceiling mount



Camera body



(Front)

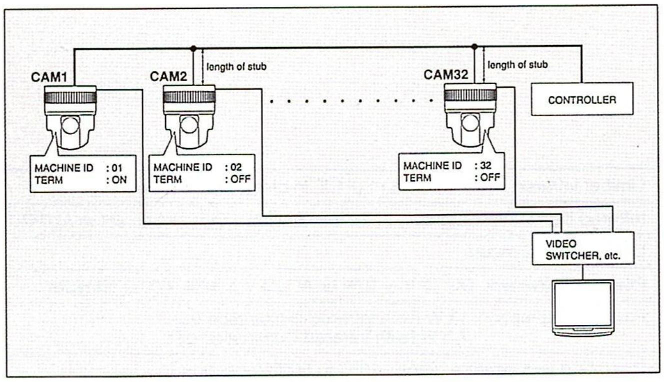


(Back: Camera side)

Dome cover
Dome cover lens

View when the camera body cover is removed.

Basic system

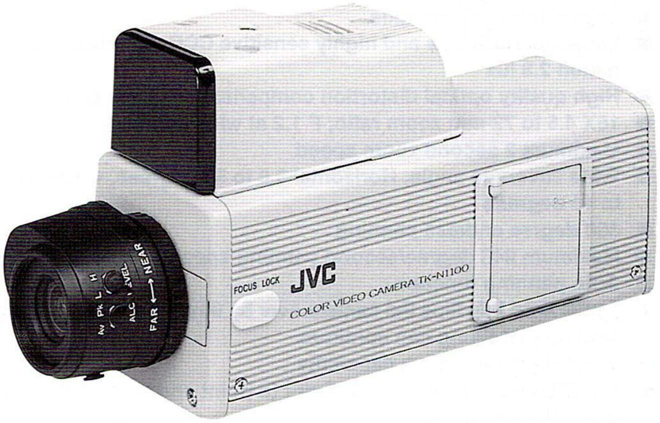


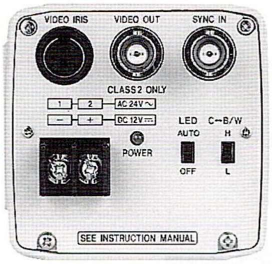
Camera	
Signal	PAL
Image device	1/3" CCD
Effective picture element	440,000 pixels, 753H x 582V
Sync system	Line lock / internal
Signal to noise ratio	48 dB
Horizontal resolution	470 TV lines
Minimum illumination	2.8 lux at F1.2
Back light compensation (BLC)	4 patterns
Camera ID	16 characters
White balance	Auto tracing white balance / manual
Lens	
Zoom ratio	16x, 4.5 to 72mm
Iris range	F 1.2 to F 170
Zoom speed	2 seconds end to end
Focus speed	Approx. 1 second
Motion mechanism	
Panning	360 degrees endless
Panning speeds	240, 80, 12, 4, 2 degrees/second
Tilting speed	120, 60, 6, 2, 1 degrees/second
General	
Remote control input	RS-422A or RS-485 (non-isolated)
Power requirement	AC 24 V, 50/60 Hz
Power consumption	Approx. 1.4 A
Operating temperature range	-10 to 50 degrees C (14 to 122 degrees F) 0 to 40 degrees C (32 to 104 degrees F) recommended
Dimensions	Approx.154 mm (6.1") diameter x 185 mm (7.3") height
Weight	2 kg (4.4 lbs.)

1/3" Twin CCD Colour/Infrared Video Camera

TK-N1100E 24 V AC/12 V AC

- **JVC's revolutionary Self-Selecting Colour or IR camera features interline-transfer system 1/3" colour CCD image sensors, delivering 460 lines of horizontal resolution with a low light sensitivity of 2 lux. The IR mode is automatically triggered when the video signal drops to a pre-determined level, thus providing crisp black and white images down to zero lux illuminance under infrared illumination, invisible to human eye. An infrared illuminator lights automatically when the black and white mode is set.**
- **The built-in electronic shutter offers a choice of nine shutter speeds from 1/50 (PAL) or 1/60 (NTSC) to 1/10,000 second, with either automatic or manual setting.**
- **The TK-N1100 has an advanced automatic gain control (AGC) function that automatically increases the camera's sensitivity when ambient light drops below a preset level.**
- **TTL auto tracking white balance adjustment accurately matches white balance with shooting conditions. A manual override brings additional flexibility (2 axes; G-Mg and R-B).**
- **External sync input (composite or black burst) for genlock operation is available via a BNC connector. The camera automatically switches to external sync when the reference signal is applied.**





Shown with optional lens

Signal system: PAL

Pickup element: Interline-transfer system 1/3-inch CCD x2 (for black/white and colour, each)

Pickup area: 1/3-inch optical size 4.8 (H) x 3.6 (V) mm

Number of effective: 752(horizontal) x 582 (vertical) pixels (each for black/white and colour)

Sync system: Internal/external/power source sync (50 Hz areas only)

External synch input: Composite video signal (VBS): 1 V(p-p): 75 ohms terminated (or black burst signal (BB), 0.45 Vp-p

Video output: Composite video signal: 1 V(p-p), 75 ohms, unbalanced

Video signal-to-noise ratio: 50 dB

Resolution: 460 TV lines (horizontal)

Minimum required illumination: 2 lux (F1.2, AGC switch set to "ON", in colour mode)
0 lux (Infrared illumination switch "ON", in black/white mode)

Limit of infrared illumination: 3 m (F1.2, in black/white mode)

Infrared illumination: Lighting in the black/white mode (when set to AUTO)

Lens mount: C mount

Power requirement: DC 12 V ± 10% or AC 24 V ± 10%, 60 Hz (U type)

Power consumption: 13 W (with infrared illumination on)
7.5 W (with infrared illumination off)

Operating temperature range:–10°C to 50°C (operation),
0°C to 40°C (recommended)

Weight: 700 g (1.6 lbs.)

Provided accessories: 3P IRIS PLUG, 4P IRIS PLUG

1/3″ CCD Colour DSP CCTV Cameras

TK-C420E/TK-C421EG

(24 V AC/12 V DC) (220 V - 240 V AC)

TK-C400E/TK-C401EG

(24 V AC/12 V DC) (220 V - 240 V AC)

TK-C420E/TK-C421EG

- High-resolution 1/3 inch Interline transfer (IT) CCD with 440K pixels (470 TV lines horizontal resolution)

TK-C400E/TK-C401EG

- High-sensitivity 1/3 inch Interline Transfer (IT) CCD with 290K pixels with no image lag or distortion (0.9 lux at F1.2)

Both TK-C420E and TK-C400E

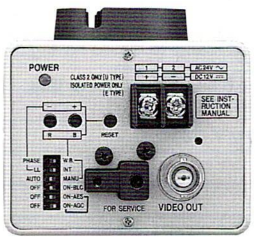
- Digital Signal processor automatically adjusts parameters to ensure sharp, natural colour pictures in a wide range of lighting conditions, even near total darkness
- Automatic gain control (AGC) adjusts gain as ambient light sensitivity changes for fully exposed pictures even at 1.5 lux (TK-C420E) and 0.9 lux (TK-C400E)
- White balance is adjusted either automatically (Auto-white) or manually over colour temperature range from 2,900K to 8,000K, assuring accurate rendition under varying lighting conditions
- Quiet signal to noise ratio of 48 dB
- Wide range detail enhancement in both horizontal and vertical; dual edged with 2H line memory

NEAR
FAR
ALC
LEVEL
BF LOCK
JVC
COLOR VIDEO CAMERA
DIGITAL

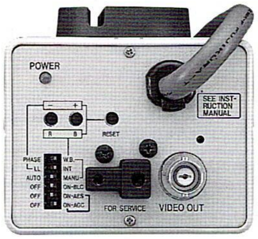
Shown with optional lens

VIDEO
DC
L
H
LEVEL
IRIS
JVC
COLOR VIDEO CAMERA
DIGITAL

Signal system	Based on PAL standard
Pickup device	1/3" Interline transfer CCD with complementary colour filter
Effective picture elements	440,000 (752 H x 582 V) (TK-C420E) , 290,000 (500 H x 582 V) (TK-C400E)
Pickup area	4.8 (H) x 3.6 (V) mm
Horizontal resolution	430 TV lines (TK-C420E) 330 TV lines (TK-C400E)
Video processing	9 bit Digital Signal Processing (DSP)
Sync system	Internal, line lock (50 Hz regions only)
Scanning system	2:1 interlaced 625 lines
Scanning frequency	(H) 15,625 kHz, (V) 50.0 Hz
Video output	Composite video signal : 1Vp-p, 75 ohms unbalanced
Video S/N	48 dB (AGC off)
Minimum illumination	1.5 lux (F1.2, AGC on) (TK-C420E) 0.9 lux (F1.2, AGC on) (TK-C400E)
Iris control	Video, DC, Auto Electronic Iris (AES variable shutter speed)
White balance	Automatic Tracking White balance (ATW), Manual
Back Light Compensation (BLC)	Selectable ON and OFF
Automatic Electronic Shutter (AES)	Selectable ON and OFF
Lens mount	C or CS mount adjustable
Power requirement	24 V AC, 60 Hz, DC 12 V(TK-C420E/400E) AC 220 to 240 V (50/60 Hz) (TK-C421EG/C401EG)
Power consumption	4 W (TK-C400E/401EG), 4.4 W (TK-C420E/421EG)
Operating temperature range	-10°C - 50°C (14°F - 122°F)
Dimensions (W x H x D)	70 x 65 x 126 mm
Weight	750 g (TK-C421EG/TK-C401EG) 510 g (TK-C420E/TK-C400E)



TK-C420E/TK-C400E

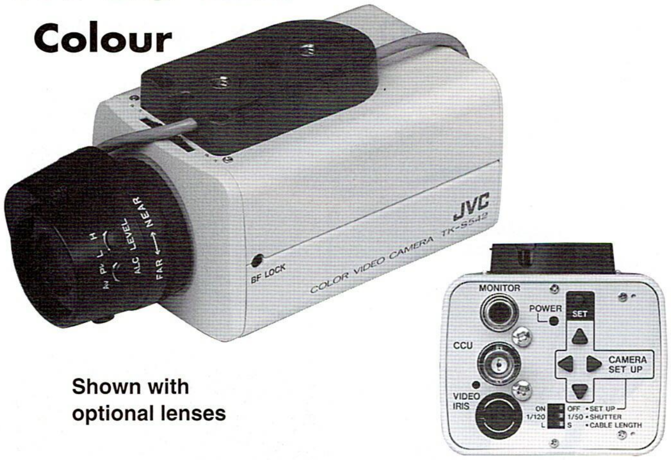


TK-C421EG/TK-C401E

1/3" CCD Single Cable Video/Power Cameras

TK-S542E

Colour



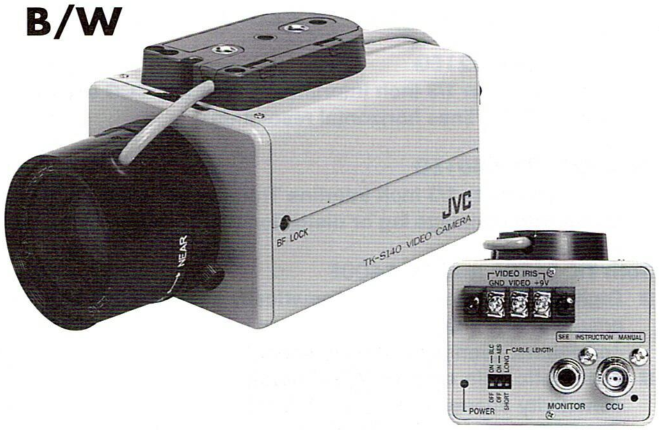
Shown with optional lenses

- JVC's advanced 1/3" CCD comprises 440,000 pixels delivering 460 lines of horizontal resolution
- Minimum required ilumination is just 2 lux at F1.2
- S/N ratio: 46 dB
- Incorporates a unique digital signal processing IC for stable colour reproduction
- Four types of backlight compensation modes and TTL auto-tracking white balance ensure optimum picture quality under backlit lighting conditions
- Built-in character generator
- An innovative multiplexing system feeds pictures, power, and sync through a single coaxial cable for enhanced operability and easy connection. A cable length selector switch optimises functions for coaxial cable lengths up to 500 m between camera and camera control unit.

Signal system:	Based on PAL standard
Image device:	1/3" interline-transfer CCD
Pickup element:	IT (interline-transfer) system CCD solid-state image sensor (with complementary colour filter: Ye-Cy-Mg-Gr)
Effective picture elements:	440,000
Sync system:	External (Special sync signal from exclusive CCU)
Sync input:	Special sync signal from excusive CCU
Video output:	Camera output: 0.7 V (p-p) (Applicable to exclusive CCU) Monitor output: 1.0 V (p-p), high-impedance
Auto-iris lens output:	Video iris: Applicable to lenses having 0.7 V (p-p), 9 V DC, 30 mA or less DC iris: Drive 0.5 to 4 V, 25 mA or less; Control 1k ohm standard
Scannning frequency:	H: 15.625 kHz V: 50 Hz
Video S/N:	46 dB
Horizontal resolution:	460 TV lines
Minimum illumination required:	2 lx (F 1.2, AGC 20 dB)
Electronic shutter:	(Normal 1/50), 1/120
White balance:	Auto/manual: 2500°K~7000°K
BLC:	ON and OFF
Lens mount:	C/CS mount
AGC:	ON and OFF (0~+20 dB)
Power requirement:	Fed from exclusive CCU (15 V to 21 V DC, 290 mA)
Power consumption(max):	120 mA (22 V)-160 mA (16 V)
Operating temperature:	–10°C ~ +50°C (14°F to 122°F) Recommended: 0°C ~+40°C (32°F to 104°F)
Weight:	440 g

TK-S140E

B/W

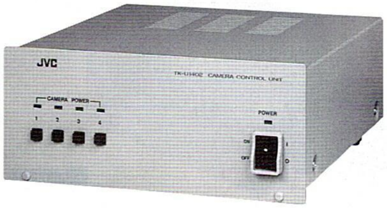


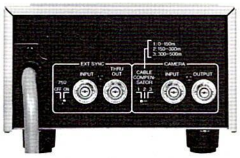
- With high-sensitivity, no after-image and no geometrical distortion, the TK-S140E is the perfect choice for a wide range of system applications — connected directly to a monitor or through a camera control unit
- An innovative multiplexing system feeds pictures, power, and sync through a single coaxial cable for enhanced operation and easy connection. A cable length selector switch optimises functions for coaxial cable lengths up to 500 m between camera and camera control unit.
- The Automatic Electronic Shutter (AES) continuously adjusts speed to ensure correct exposures under all lighting conditions, even when a manual iris lens is used.
- The built-in backlight compensation (BLC) function provides added flexibility by ensuring excellent image quality when shooting backlit subjects
- Back-focus adjustment function allows easy adjustment and installation
- External Sync is switchable between internal/external lock
- Either C-mount or CS-mount lens can be attached to the camera by adjusting the back focus

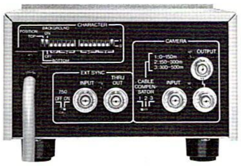
TK-S140E	
Image sensor:	Interline-transfer CCD
Number of effective pixels:	300,000 (512 × 582 V)
Image size:	1/3 inch
Synchronization method:	Internal/External
Scanning frequency:	H: 15.625 kHz V: 50 Hz
Horizontal resolution:	380 TV lines
Video S/N ratio:	50 dB
Minimum required illumination:	0.3 lux (F1.4)
Lens mount:	C/CS mount
Power supply:	Fed from an exclusive CCU
Power consumption:	120 mA (22 V) – 160 mA (16 V)
Operating temperature range:	–10°C ~ +50°C (14°F to 122°F) Recommended: 0°C ~+40°C (32°F to 104°F)
Dimensions:	70 (W) x 65 (H) x 112 (D) mm
Weight:	410 g

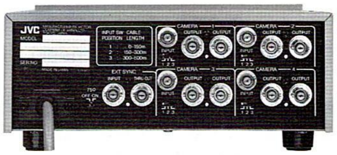
Single Cable Video/Power Camera Control Units

TK-U1003EG TK-U1004EG TK-U1402EG





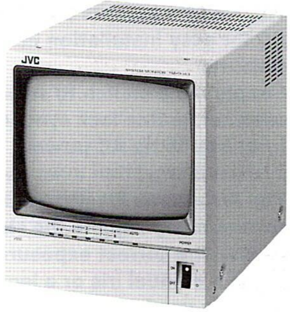




- **TK-U1003EG (and TK-U1004EG, TK-U1402EG)**
- **Coaxial multiplex systems that transmit images, power, and synchronising current through one coaxial cable; excellent for installation and system formation.**
- **Cable compensation circuits display clear images even when longer cables are used.**
- **Loop through input for external sync signal aids in systemisation.**

- **TK-U1004EG**
  The camera number is superimposed for ease of identification.

- **TK-U1402EG**
  Simultaneously drives up to four coaxial multiplexed video cameras.



- **See also**
  TM-9043EG
  4 Channel 9" B/W Monitor
  W/Camera power
  page 72

Model	TK-U1003EG	TK-U1004EG	TK-U1402EG
Applicable cameras:	TK-S542E and TK-S140E	←	←
Camera input:	1 input, 0.7 Vp-p (V), 75 ohms, BNC	←	4 inputs, 0.7 Vp-p (V), 75 ohms, BNC
Camera output:	1 output, 1.0 Vp-p (V), 75 ohms, BNC	2 outputs, 1.0 Vp-p (VS), 75 ohms, BNC	2 outputs for each input, 1.0 Vp-p (VS), 75 ohms, BNC
Synchronisation system:	Internal/external (auto switching)	←	←
Sync frequency:	Horizontal 15.625 kHz, Vertical 50 Hz	←	←
External sync signal input:	(Through-output, with 75-ohm termination switch) SYNC: 4.0 Vp-p, or VS: 1.0 Vp-p	←	←
Frequency response:	To 8 MHz	←	←
DG/DP:	Less than 3°, less than 3% (APL 10 to 90%)	←	←
Cable compensation:	3-position switching	←	←
Maximum extension distance:	500 m (5C-2V), 200 m (2C-2V eq. RG-59/U)	←	←
Camera number superimpose function:	—	Provided Maximum number of characters: 4 Variety of characters: 13	—
Power output for camera:	21 V DC, 300 mA (max.)	←	←
Power requirement:	220 V AC, 50/60 Hz	←	←
Power consumption	17 W	19 W	50 W
Ambient temperature range	Operating: −10 to +50°C (+14 to +122°F) Recommended: 0 to +40°C (+32 to +104°F)	←	←
Dimensions (W × H × D)	140 × 93 × 239 mm	←	210 × 93 × 239 mm
Weight:	2.1 kg	2.1 kg	3.7 kg
Applicable rack mounting bracket	UC-P1012U (EIA 2U)	←	←

1/3″ CCD B/W Video Cameras

TK-S241E

JVC
VIDEO CAMERA
SYNC IN
VIDEO OUT

(Shown with optional lenses)

- The 1/3″ CCD image pick-up delivers 380 lines of horizontal resolution, and is supported by built-in contour and AGC circuits for sharp pictures at just 0.095 lux
- High-sensitivity, low after-image and low geometric distortion make the TK-S241E ideal where high quality images are required
- The camera accepts 24 V AC or 12 V DC for easy installation in various systems
- Simply flip a switch to select internal, external, or line lock synchronisation (requires 50 Hz AC power). This makes system integration even easier
- The Automatic Electronic Shutter continuously adjusts the shutter speed to give the correct exposure even when a manual iris or a lens without an iris is used.
- Built-in backlight compensation function improves image quality when shooting backlit subjects.
- Either C-mount or CS-mount lens can be attached to the camera with the lens mount change function.

Image sensor: Interline-transfer CCD
Number of effective pixels: 300,000 (512 × 582 V)
Image size: 1/3 inch
Synchronisation method: External, internal and line lock synchronization (50 Hz AC power only)
Scanning frequency: H: 15.625kHz V: 50 Hz
Horizontal resolution: 380 TV lines
Video S/N ratio: 50 dB
Minimum required illumination: 0.3 lux (F1.4)
Lens mount: C/CS mount
Power supply: 24 V AC, 50/60 Hz; 12 V DC
Power consumption: 3 W
Operating temperature range: −10°C/14°F to +50°C/122°F (Recommended: 0°C/32°F to 40°C/104°F)
Dimensions: 70 (W) x 65 (H) x 112 (D) mm
Weight: 410 g

TK-S340EG

JVC
TK-S340 VIDEO CAMERA
SYNC IN
VIDEO OUT

- High-quality CCD imaging of high sensitivity: 1/3″ CCD image pick-up delivers 380 lines of horizontal resolution, with built-in contour and AGC circuits for sharp, distortion-free pictures under low light conditions – a minimum practical illumination of 0.3 lux
- Accepts 220 ~ 240 V AC
- Easy system integration: simply flip a switch to select internal, external, or line lock synchronisation (requires 50 Hz AC power)
- Automatic Electronic Shutter to give the correct exposure even when a manual iris or a lens without an iris in used
- Built-in back-light compensation function
- C or CS mount changeable

Image sensor: Interline-transfer CCD
Number of effective pixels: 300,000 (512 × 582 V)
Image size: 1/3 inch
Synchronisation method: External, internal and line lock synchronisation (50 Hz AC power only)
Scanning frequency:H: 15.625 kHz V: 50 Hz
Horizontal resolution: 380 TV lines
Video S/N ratio: 50 dB
Minimum required illumination: 0.3 lux (F1.4)
Lens mount: C/CS mount
Power supply: 220 ~ 240 V AC, 50/60 Hz
Power consumption: 3.5 W
Operating temperature range: −10°C/14°F to +50°C/122°F (Recommended: 0°C/32°F to 40°C/104°F)
Dimensions: 70 (W) x 65 (H) x 112 (D) mm
Weight: 800 g

TK-S350EG

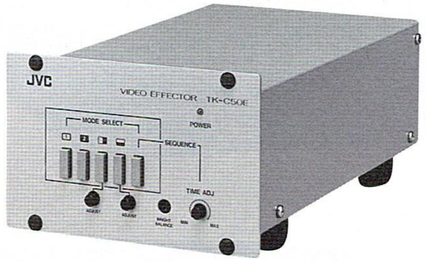
JVC
SYNC IN
VIDEO OUT

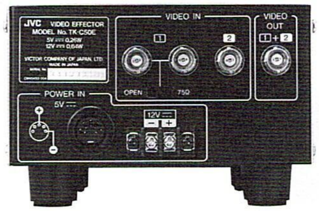
- The 1/3" CCD image pick-up delivers 560 lines of horizontal resolution, and is supported by built-in contour and AGC circuits for sharp pictures at just 0.3 lux.
- High-sensitivity, low after-image and low geometric distortion make the TK-S350EG ideal where high quality images are required.
- The camera accepts 220 V to 240 V AC power.
- A switch to select internal, external, or line makes system integration even easier.
- The Automatic Electronic Shutter continuously adjusts the shutter speed to give the correct exposure even when a manual iris or a lens without an iris is used.
- Built-in backlight compensaton function improves image quality when shooting backlit subjects.
- Either C-mount or CS-mount lens can be attached to the camera with the lens mount change functon.

Image sensor: Interline-transfer CCD
Number of pixels: Total: 470,000; 798 (H) x 587 (V) Effective: 430,000; 753 (H) x 582 (V)
Image size: 1/3 inch
Synchronisation method: External, internal, and line lock synchronisation (50 Hz AC power only)
Scannning frequency: (H) 15.625 kHz (V) 50 Hz
Resolution: 560 TV lines (horizontal)
Video S/N ratio: 48 dB
Minimum required ilumination: 0.31 x (F/1.4), 0.2 lx (F/1.2),0.15 lx (F/1.0)
Lens mount: C/CS mount
Power supply: 220 V to 240 V AC, 50/60 Hz
Power consumption: 4 W
Operating temperature range: −10°C to +50°C (Recommended temperature range: 0°C to +40°C)
Weight: 800 g

Effector

TK-C50E


JVC
VIDEO EFFECTOR TK-C50E
MODE SELECT
POWER
SEQUENCE
TIME ADJ


JVC VIDEO EFFECTOR MODEL No. TK-C50E
VIDEO IN
VIDEO OUT
1+2
OPEN
75Ω
POWER IN
5V
12V

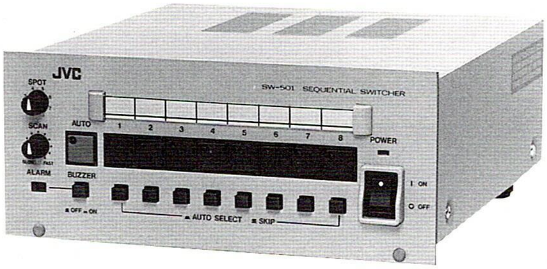
- **View two sources on one monitor**
- **Video splitter adopting a full genlock system**
- **Two image signals are sent out separately (top/bottom, left/right, each corner)**
- **Sequential switching capability**

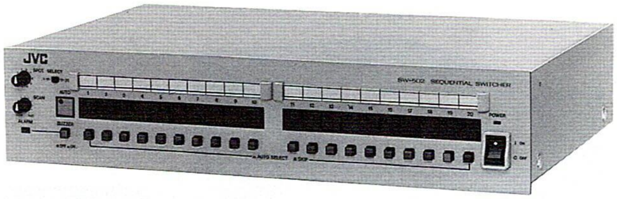
Signal system:	Based on PAL standard
Video input 1:	Composite video signal 1.0 Vp-p, 75 ohms (BNC) Bridged output terminal (BNC), with termination switch
Video input 2:	Composite video signal 1.0 Vp-p, 75 ohms (BNC) *Input signals should be gen-locked to those at the video input 1.
Selection function	Mode selection switches “ 1/ 2/ ◨ / ⬓ /SEQUENCE”
Adjustment function:	1) Switching time adjustment volume “SEQUENCE-TIME ADJ” Adjustment range: approx. 1 sec. (MIN) to approx. 40 sec. (MAX)
	2) Horizontal screen ratio adjustment volume “ ◨ -ADJUST” Adjustment range: Eraseable for entire screen of left screen and right screen
	3) Vertical screen ratio adjustment volume “ ⬓ ADJUST” Adjustment range: Eraseable for entire upper screen and lower screen
	4) Brightness balance adjustment range: ±10% (black level) *Adjustment only for input ■ screen
Power requirement:	5 V DC (± 5%) or 12 V DC (± 10%)
Power consumption:	0.26 VA (5 V DC)/0.64 VA (12 V DC)
Weight:	1.25 kg
Accessories:	5V DC power cable (DIN 5-pin – DIN 5-pin, cable length: Approx. 2 m)

Sequential Switchers

SW-501EG (without CE)

SW-502EG (without CE)





INPUT
SPOT OUT
AUTO OUT

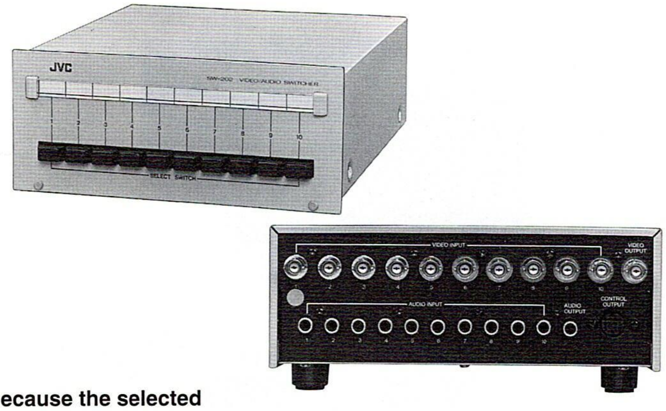
- **Detailed monitoring is possible through two outputs (AUTO and SPOT) for 20 input systems. (eight input systems for SW-501EG)**
- **Using the skipping function, the operator can select which camera will be monitored during auto selection mode.**
- **Because images are switched over within the blanking time, image disturbance is minimised to reduce operator fatigue when monitoring for long periods.**
- **Because the camera number is superimposed, the place to be monitored is easily identified.**
- **Various types of monitoring operation are possible using the built-in alarm inputs and alarm buzzers.**
- **When monitoring is carried out with more than one sequential switch, synchronisation of the switched image is possible using the external timer function.**
- **They offer excellent system formation characteristics due to the large number of selection inputs and outputs.**

Model	SW-501EG	SW-502EG
Video input	8 inputs, VS or VBS, 1.0 Vp-p, 75 ohms, BNC	20 inputs, VS or VBS, 1.0 Vp-p, 75 ohms, BNC
Alarm input	8 inputs (one for each video input), make-contact signal, 13-pin DIN connector	20 inputs (one for each video input), make-contact signal, 13-pin DIN connector × 2
External spot input	3 terminals (3 circuit signals coded to correspond to each video input), make-contact signal, 13-pin DIN connector	5 terminals (5 circuit signals coded to correspond to each video input), make-contact signal, 13-pin DIN connector
Serial control signal input	AUTO, MANUAL (1 to 8), ALARM (1 to 8) selectable, 2 terminals, special signal, 8-pin DIN connector	AUTO, MANUAL (1 to 20), ALARM (1 to 20) selectable, 2 terminals, special signal, 8-pin DIN connector
External timer input	1 input, make-contact signal, 8-pin DIN connector	←
Auto output	1 output, VS or VBS, 1.0 Vp-p, 75 ohms, BNC	←
Spot output	1 output, VS or VBS, 1.0 Vp-p, 75 ohms, BNC	←
Control signal output	3 terminals (3 circuit signals obtained by coding auto output select signal), open-collector output, 13-pin DIN connector	5 terminals (5 circuit signals obtained by coding auto output select signal), open-collector output, 13-pin DIN connector
Serial control signal output	(Outputs status data after the status of the unit has changed) 2 terminals, special signal, 8-pin DIN connector	←
Timer output	1 output, open-collector output, 8-pin DIN connector	←
Frequency response	To 8 MHz	←
DG/DP	Less than 3°, less than 3% (APL to 90%)	←
Crosstalk	Less than –48 dB (4 MHz)	←
Timing of video switching	During V blanking period	←
Alarm indication	Red LED and buzzer (with buzzer ON/OFF switch)	←
Alarm time	2 to 120 seconds selectable	←
Camera number indication	Provided (C1 to C8), with internal ON/OFF switch	Provided (C1 to C20), with internal ON/OFF switch
Timer setting	0.5 to 30 seconds selectable	←
Skip switch	Provided	←
Power requirement	220 to 240 V AC, 50/60 Hz	←
Power consumption	5.2 W	5.6 W
Ambient temperature	Operating: –10 to +50°C (14 to 122°F) Recommended: 0 to +40°C (32 to 104°F)	←
Dimensions (W×H×D)	210×93×242 mm	420×93×242 mm
Weight	2.4 kg	4 kg
Rack mount	Applicable rack mounting bracket: UC-P1012U (EIA 2U)	Possible into EIA 19-inch rack with provided brackets (EIA 2U)

Switching and Distribution

SW-201U 5-INPUT VIDEO SWITCHER

SW-202U 10-INPUT VIDEO/AUDIO SWITCHER



- **These units are mechanically-locked image signal switchers and because the selected condition is maintained regardless of whether the system's power is ON/OFF they are ideal preset switches.**
- **These units are excellent for system formation due to their sound signal switching function and control signal output. (SW-202U only)**

SW-201U:

Video input: 5 inputs, VBS: 1.0 Vp-p, 75 ohms, BNC
Video output: 1 output, VBS: 1.0 Vp-p, 75 ohms, BNC
Dimensions: 210 (W) x 93 (H) x 239 (D) mm
Weight: 1.2 kg
Applicable rack mounting bracket: UC-P1012U (EIA 2U)

SW-202U:

Video input: 10 inputs, VBS: 1.0 Vp-p, 75 ohms, BNC
Audio input: 10 inputs, 0 dBs, high impedance, RCA-pin
Video output: 1 output, VBS: 1.0 Vp-p, 75 ohms, BNC
Audio output: 1 output, 0 dBs, high impedance, RCA-pin
Control signal output: 10-circuit make-contact signal according to select switch setting (Capacity: 35 V DC, 0.25 A)
Dimensions: 210 (W) x 93 (H) x 239 (D) mm
Weight: 1.9 kg
Applicable rack mounting bracket: UC-P1012U (EIA 2U)
Accessories: Control signal output connector

VIDEO SIGNAL DISTRIBUTOR
DU-102EG

- **This unit is equipped with 2 channels for distributors of 1-input/3-distribution type.**
- **This unit has a built-in cable compensating circuit.**
- **This unit is equipped with a through output.**

Distributing capacity: 2 inputs, each with 3 outputs
Video input: 2 inputs, 1.0 Vp-p (VBS), 75 ohms, BNC (through-output, with 75-ohm termination switch)
Video output: 3 outputs x 2, 1.0 Vp-p (VBS), 75 ohms, BNC
Signal-to-noise ratio: Better than 55 dB
Frequency response: to 8 MHz
DG/DP: Less than 1°, less than 1% (APL 10–90%)
Crosstalk: Less than –55 dB (4 MHz)
Cable compensation: Two-position switching
Power requirement: 220 to 240 V AC, 50/60 Hz
Power consumption: 4.9 W
Ambient temperature: Operating: –10 to 50°C (14 to 122°F)
Dimensions: 140 (W) x 93 (H) x 239 (D) mm
Weight: 1.6 kg

SYNC SIGNAL DISTRIBUTOR
DU-401EG
(without CE)

- **This unit is equipped with 2 channels for distributors of 1-input/3-distribution type.**
- **This unit is equipped with a through output.**
- **Signals from 2.0 Vp-p to 8.0 Vp-p are distributed as a 4.0 Vp-p signal through its output stabilising circuit.**

Distributing capacity: 2 inputs, each with 3 outputs
Signal input: 2 inputs, 2.0 to 8.0 Vp-p, 75 ohms, BNC (through-output, with 75 ohm termination switch)
Signal output: 3 outputs x 2, 4.0 Vp-p, 75 ohms, BNC
Delay time: Within 200 nsec
Pulse width variation: Within ± 150 nsec
Rise and fall times: Within 100 nsec (with input of 4.0 Vp-p)
Power requirement: 220 to 240 V AC, 50/60 Hz
Power consumption: 6.5 W
Ambient temperature: Operating: –10°C to +50°C (14°F to 122°F)
Dimensions: 140 (W) x 93 (H) x 239 (D) mm
Weight: 1.6 kg

SYNC SIGNAL GENERATOR
SG-101EG
(without CE)

- **This synchronous signal generator has a built-in synchronous signal distributor.**
- **This unit is equipped with a BB signal output.**

Signal output: HD: 1 output, 4.0 Vp-p, 75 ohms, BNC
VD: 1 output, 4.0 Vp-p, 75 ohms, BNC
C. SYNC: 1 output, 4.0 Vp-p, 75 ohms, BNC
BB: 1 output, 0.45 Vp-p, 75 ohms, BNC
Distributing output: 3 outputs x 2, 4.0 Vp-p, 75 ohms, BNC (each circuit switchable between HD, VD and C. SYNC)
Sync frequency: Burst 4.4336/8 MHz, Horizontal 15.625 kHz, Vertical 50 Hz
Power requirement: 220 to 240 V AC, 50/60 Hz
Power consumption: 6.5 W
Ambient temperature: Operating: –10°C to +50°C (14°F to 122°F)
Dimensions: 140 (W) x 93 (H) x 239 (D) mm
Weight: 1.6 kg

Long Distance Transmission

DU-501EG* CABLE COMPENSATOR

JVC
DU-501 CABLE COMPENSATOR
LEVEL
CABLE LENGTH
CLAMP
POWER
ON
OFF

OUTPUT
INPUT

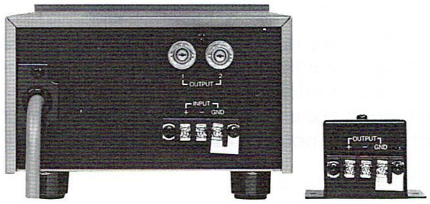
- Because the cable can be extended up to 1.25 km, it is excellent for system formation (when 5C-2V cable is used).
- Stable image signals can be transmitted through its built-in clamp circuit.

Video input: 1 input, 1.0 Vp-p (VBS), 75 ohms, BNC
Video putput: 2 outputs, 1.0 Vp-p (YBS), 75 ohms, BNC
Frequency response: to 6 MHz
DG/DP: Less than 3°, less than 3% (APL 10% to 90%)
Cable compensation: 9 Position switching
Video stabilizer circuit: Provided
Power requirement: 220 to 240 V AC, 50/60 Hz
Power consumption: 4.0 W
Ambient temperature: Operating: -10°C to +50°C (14°F to 122°F), Recomended: 0°C to +40°C (32°F to 104°F)
Dimensions: 140 (W) x 93 (H) x 239 (D) mm
Weight: 1.7 kg
Applicable rack mounting bracket: UC-P1012U (EIA 2U)

*Please check for availability in your region, without CE.

DU-502EG* TWISTED-PAIR CABLE TRANSMISSION UNIT

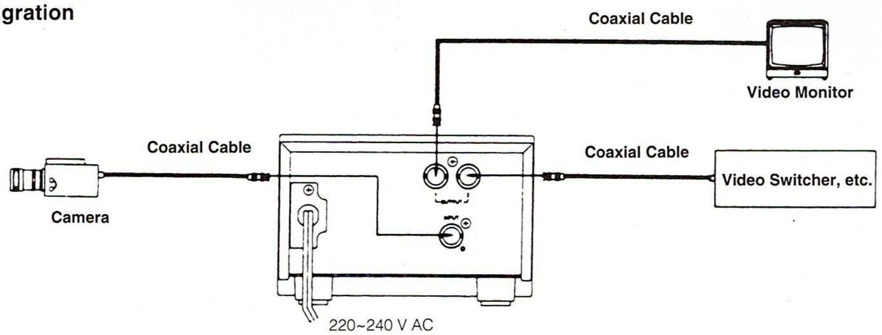
JVC
DU-502 VIDEO TRANSMITTER
LEVEL
CABLE LENGTH
CLAMP
POWER
ON
OFF
CAMERA INPUT


OUTPUT
INPUT
GND
OUTPUT
GND

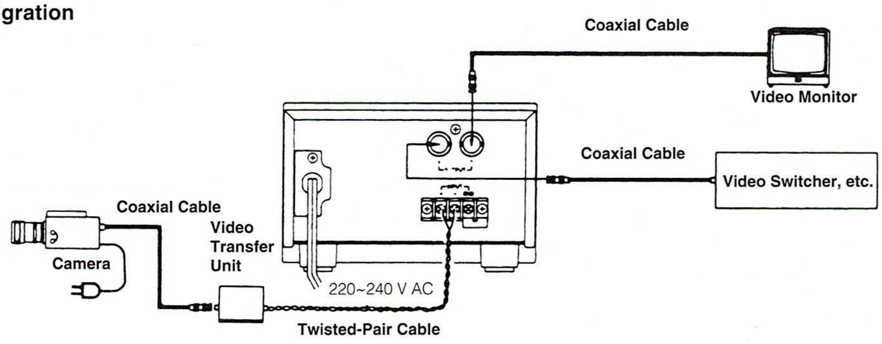
- Because the cable can be extended up to 1.25 km, it is excellent for system formation (when 110 twisted-pair cable is used).
- Stable image signals can be transmitted through its built-in clamp circuit.

Video input: Transformer unit: 1 input, 1.0 Vp-p (VBS), 75 ohms, BNC
Main unit: 1 input, 1.2 Vp-p (VBS), 110 ohms, balanced, screw terminal
Video putput: Transformer unit: 1 outputs, 1.0 Vp-p (VBS), 110 ohms, balanced, screw terminal
Main unit: 2 output, 1.0 Vp-p (VBS), 75 ohms, BNC
Frequency response: to 5 MHz
DG/DP: Less than 3°, less than 3% (APL 10% to 90%)
Cable compensation: 9-Position switching
Video stabilizer circuit: Provided
Power requirement: 220 to 240 V AC, 50/60 Hz
Power consumption: 3.4 W
Ambient temperature: Operating: -10°C to +50°C (14°F to 122°F),
Recomended: 0°C to +40°C (32°F to 104°F)
Dimensions: Main unit 140 (W) x 93 (H) x 239 (D) mm
Transformer unit: 58 (W) x 37 (H) x 83.2 (D) mm
Weight: Main unit: 1.7 kg Transformer unit: 150 g
Applicable rack mounting bracket: UC-P1012U (EIA 2U)

DU-501EG System Configration


Coaxial Cable
Video Monitor
Coaxial Cable
Coaxial Cable
Video Switcher, etc.
Camera
220~240 V AC

DU-502EG System Configration

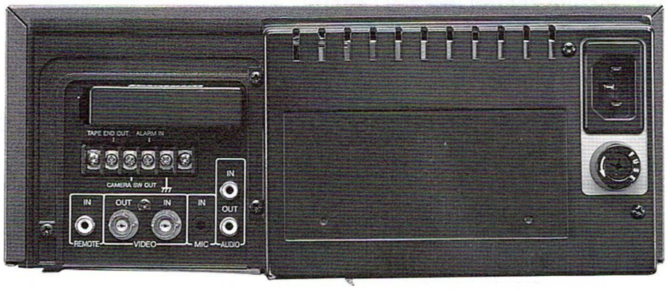

Coaxial Cable
Video Monitor
Coaxial Cable
Video Switcher, etc.
Coaxial Cable
Video Transfer Unit
Camera
220~240 V AC
Twisted-Pair Cable

"Real Time" Video/Audio Timelapse Recorder

SR-L901E

- Up to 24 Hours of Continuous Video/Audio Recording and Playback
- Realtime Video/Audio Recording and Playback
- High-Speed Playback Sound Processing Function
- Alarm Recording/Sensor Recording/Alarm Search Capability
- Time/Date Generator
- Automatic Repeat Recording
- Signal Monitoring with Power Off
- Others
  - Advanced mode lock system
  - Summer time adjustment
  - Automatic re-start of recording after power failure
  - Field recording capability
  - 1 year time/date backup
  - Automatic head cleaner
  - Digital tracking (8 hour mode only)
  - Quick-response
  - External timer recording capability
  - Camera swiching signal output
  - Noiseless stills
  - Shuttle search (x9 normal in both directions)
  - Microphone input
  - Wired remote control (optional)
  - Tape end out
  - Large LCD display
  - On-Screen Menu Setting

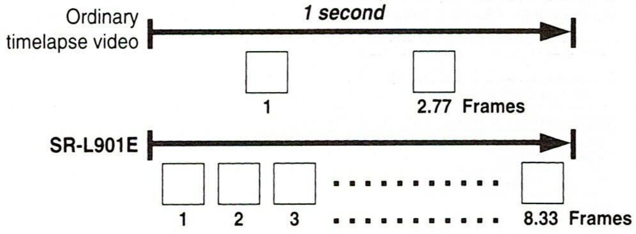
JVC
OPERATE
VIDEO CASSETTE RECORDER SR-L901E
TIMELAPSE
STOP/EJECT
24H
ALARM
AL RESET
STOP 8H 0000
12-12-96 12:00
PAUSE/STILL
PLAY
REW
FF
REC



- **Real time video/audio recording and playback**

Realtime recording for 24 hours without any missing data

Two recording modes – 8-hour mode and 24-hour (timelapse) mode – are available (using E-180 cassette). In the 24-hour mode, realtime recording at a frame rate of more than 8 frames/second can be achieved, allowing 24-hour continuous recording with density approx. 3 times that of nomal timelapse recording.



- **Up to 24 hours of continuous video/audio recoeding and playback**

MODE	Available recording time (hour)					Recording interval (sec)	Audio recording	Tape speed
	E-240	E-160	E-120	E-90	E-30			
8H	8	6	4	3	1	0.016	Yes	11.7 mm/sec (Continuous)
24H Timelapse	24	18	12	9	3	0.048	Yes	3.9 mm/sec (Continuous)

GENERAL	
Power requirement :	AC220-240 V, 50/60 Hz
Power consumption:	18 W (4 W with power off)
Temperature	
Operating : Storage :	5°C to 40°C -20°C to 60°C
Operating humidity :	30% to 80 %
Operating position :	Horizontal only
Dimensions (W x H x D) :	275 x 115 x 342 mm
Weight :	5.0 kg
Tape Used:	VHS PAL
Tape width :	12.65 mm
Tape speed :	11.70 mm/sec (8H mode) 3.90 mm/sec (24H mode)
Recording and playback time :	8 (8H mode), 24 hours (24 H mode) with E-240 cassette
VIDEO	
Signal system :	PAL-type colour signal and CCIR monochrome signal, 625 lines/50 fields
Recording system	Luminance : FM recording Chroma : Down-converted direct recording
Input :	0.5 to 2.0 Vp-p, 75 ohms, unbalaced (BNC)
Output :	1.0 Vp-p, 75 ohms, unbalaced (BNC)
Signal-to-noise ratio :	43 dB (8H mode)
Horizontal resolution :	230 lines (8H mode colour) 280 lines (8 H mode B/W)
AUDIO	
Number of tracks :	1 (Normal)
Input :	Line : -8 dBs, 50 k-ohms, unbalanced (RCA) Mic : -67 dBs, 600 ohms, unbalanced
Output :	-8 dBs, 1 k-ohms, unbalanced (RCA)
Frequency response :	100 Hz to 5,000 Hz (8H mode)
TIME/DATE GENERATOR	
Display :	Day, month, year, hours, minutes, seconds, Recording time
Character size :	16H

ALARM	
Input :	Grounding type contact
ACCESSORIES	
Provided accessories :	"LR6/15A/L40" battery x 4, Power cable x 1

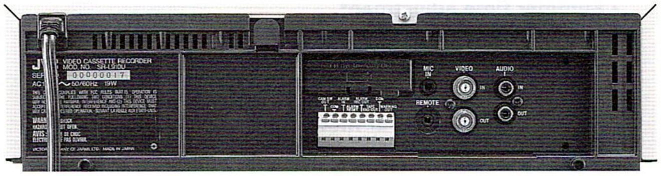
24 Hour Timelapse Video Recorder

SR-L910E

- 3, 12, 24 hours recording and playback modes
- Black and white recording mode
- Optional RS-232C control
- Aluminium diecast mechanism for high reliability
- FDP counter display / hour meter on screen
- Internal timer recording mode
- Automatic recording check
- Sensor recording mode
- Tape end buzzer, output and indication
- Selectable alarm record duration (5, 10, 15, 30, 60, 120, 180, Manual)

- On screen menu setting
- Automatic head cleaner
- Quick-response full-loading mechanism
- Picture control (normal / sharp)
- Summer time adjustment
- Wired remote control (RM-G30U)
- Double push type key lock operation
- Warning display
- Compact size 360 x 94 x 298 mm (14.2" x 3.7" x 11.7") W x H x D

JVC
TIMELAPSE
VIDEO CASSETTE RECORDER
SR-L910
VHS
00 00
L24H


VIDEO
AUDIO
MIC IN
REMOTE

GENERAL

Power requirement: AC220 - 240 V, 50/60 Hz

Power consumption: Approx. 14 W (4 W in Standby mode)

Dimensions: 360 (W) x 94 (H) x 298 (D) mm (14-3/16" x 3-3/4" x 11-3/4")

Weight: Approx. 5 kg (11.0 lbs.)

Temperature:
Operating: +5°C to +40°C (41°F to 104°F)
Storage: -20°C to +60°C (-4°F to 140°F)

Format: VHS

Tape speed: 33.35 mm/sec., VHS standard (SP) mode
11.12 mm/sec., VHS Extended mode (LP)

Recording and playback time: 3 hours (VHS Standard (SP) mode)
12, 24 hours 0.12, 0.18 sec. interval
(Timelapse mode: field recording)
(with E-180 cassette)

VIDEO

Signal system: PAL-type colour signal and CCIR monochrome signal, 625 lines/50 fields monochrome signal,

Recording system: Luminance: FM recording
Chrominance: Down-converted direct recording

Signal input: 0.5 to 2.0 Vp-p, 75 ohms, unbalanced (BNC)

Signal output: 1.0 Vp-p, 75 ohms, unbalanced (BNC)

Horizontal resolution: Colour mode: 240 lines or more (3H mode) B/W mode: 280 lines or more (3H mode)

S/N ratio: 43 dB or more (3H mode)

AUDIO

Number of tracks: 1 (normal)

Line input: -8 dBs, 50 kohms, unbalanced (RCA)

Mic input: -67 dBs, 600 ohms, unbalanced

Line output: -8 dBs, 1 kohm, unbalanced (RCA)

Frequency response: 100 Hz to 10 kHz (3H mode)

S/N ratio: 40 dB or more (3H mode)

TIME/DATE GENERATOR

Display: Month, day, year, hours, minutes, seconds, recording mode

Display position: 4 positions

Character size: 16H

Power backup: Approx. 5 years

ALARM

Input: Input-ground contact

Camera SW: Negative pulse output (approx. 5 ms)

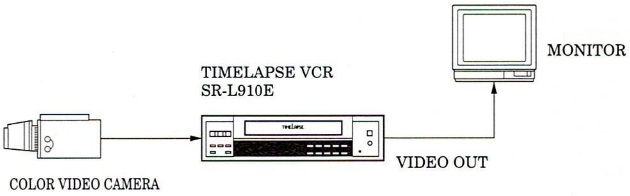
ACCESSORIES

Provided accessory: "15/AA" battery x 1

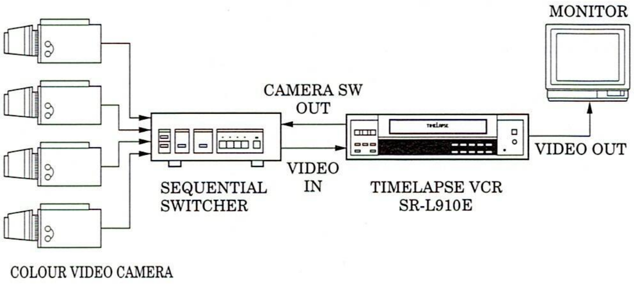
Optional accessories: RM-G30U: Remote control unit
SA-K97U: RS-232C interface kit

Design Your Own System Configuration

System 1 *Basic System*


MONITOR
TIMELAPSE VCR
SR-L910E
VIDEO OUT
COLOR VIDEO CAMERA

System 2 *Multi Camera Sequential Recording System*


MONITOR
CAMERA SW OUT
VIDEO OUT
VIDEO IN
SEQUENTIAL SWITCHER
TIMELAPSE VCR
SR-L910E
COLOUR VIDEO CAMERA

Optional Accessory

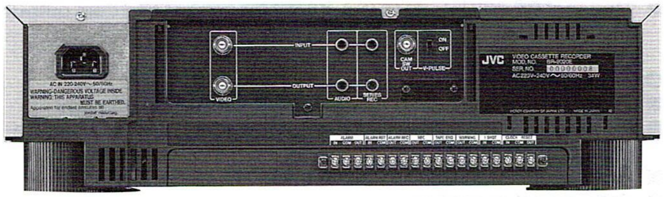
RM-G30U

VHS Timelapse VCR

BR-9020E

- Expanded recording flexibilty with up to 960 hours (40 days) of timlapse recording and one-shot recording capability
- Alarm/sensor recording with alarm/power loss memory
- Series recording and camera switching function
- Optional RS-232C interface (SA-K90E)
- On-screen setup menu and mode display
- Recording check function for instant playback quality check during recording
- Auto head cleaning mechanism
- Advanced mode lock system
- Time/date generator with approx.1-year power backup
- VIdeo mode select switch
- Auto-repeat recording
- Still, field, field advance and shuttle search
- Reverse, double-speed, and timelapse mode playback
- Digital hour meter up to 9999 hours
- Tape end buzzer
- Daylight saving time mode
- Optional wired remote control (RM-G30U)
- Timer/clock backup during power loss

TIMELAPSE
JVC
VIDEO CASSETTE RECORDER BR-9020E
12:00
00 00
VHS



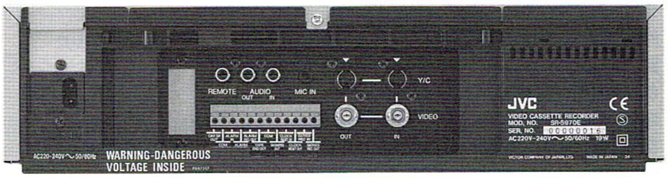
GENERAL	
Recording system	Luminance: FM; Chroma: Down-converted
SIgnal system	PAL/CCIR,625 lines
Tape speed	VHS SP:23.39 mm/sec,; VHS LP:11.70 mm/sec
Recording and playback time	3,6,24,48,72,120,168,240,480 and 960 hours(TL) (with E-180 cassette)
Operating temperature range	5°C to 40°C (41°F to 104°F)
Operating humidity	35% to 80%
Storage temperature range	-20°C to 60°C(-4°F to 140°F)
Power requireement	220 to 240 V AC, 50/60Hz
Power consumption	34 W
Dimensions(W x H x D)	435 x 124 x 375 mm
Weight	8.0 kg
VIDEO	
Input	0.5 to 2.0 Vp-p,75 ohms, unbalanced (BNC)
Output	1.0 Vp-p,75 ohms, unbalanced (BNC)
S/N ratio	More than 43 dB(VHS SP)
Horizontal resolution	Colour:240 lines (VHS SP):B/W:300 lines (VHS SP)
AUDIO	
Number of tracks	1(Normal)
Input	Line:-8 dBs,50 kohms,unbalanced (RCA)
Output	LIne:-8 dBs,1k-ohm, unbalanced (RCA)
S/N ratio	40 dB (VHS SP at 3% distortion)
TIME/DATE GENERATOR	
Display	Day, month, year, hours, minutes, seconds recording mode
Character size	16 horizontal lines
Power backup	Approx. one year
ALARM	
Alarm Input	Input-grounding type contact
Alarm output	Through-out
Cameras swithching output	Negative pulse output (approx. 5 ms), BNC
SERIES RECORDING	
Series input	Ground input, RCA
Series output	Series input through-out, RCA
Accessories	R6 batteryx3, Power cordx1

S-VHS 960 Hour Timelapse Video Recorder

SR-S970E

SVHS 625 VHS PAL

JVC
VIDEO CASSETTE RECORDER SR-S970E
OPERATE
EJECT



Recording flexibility

- High picture quality S-VHS recording
- Up to 960 hours Timelapse recording
- Field recording/playback capability
- Time/date generator with memory backup
- Audio recording in continuous 3 hour, L12 hour, and L24 hour Timelapse recording modes
- Internal/ external timer recording
- Variable alarm/sensor recording and alarm memory
- Alarm search
- Alarm/power loss memory

System flexibility

- Series recording and external record control
- Noiseless still, field advance, and reverse playback
- Camera switching function
- Optional RS-232 interface (SA-K97U) for control and data output for VTR condition printing

Other features

- On-screen setup menu, recording time and mode display
- "Record check" for instant playback quality check during recording
- Automatic head cleaning mechanism
- Auto repeat recording
- Shuttle search
- Digital hour meter
- Clock calibration
- Daylight savings time setting
- Wired remote control with optional remote control unit RM-G30
- Tape "near end" output with buzzer
- Warning indicator
- Total recording time indication

* Employs chroma-enhancing technology co-developed by JVC and **FAROUDJA** Laboratories and modified for S-VHS applications.

Recording/ Playback Time	REC/PLAY Mode Indicator	Interval (sec.) Recording/Playback	Audio Recording/Playback
960 hours (40 days)	960H	6.4	No
480 hours (20 days)	480H	3.2	No
240 hours (10 days)	240H	1.8	No
168 hours (7 days)	168H	1.14	No
120 hours (5 days)	120H	0.82	No
72 hours (3 days)	072H	0.5	No
48 hours (2 days)	048H	0.34	No
24 hours (1 day)*	024H	0.18	No
24 hours	L24H	0.18	Yes
12 hours	L12H	0.1	Yes
3 hours	003H	-	Yes

* (in the Play mode only)

General	
Power requirement	AC220 - 240 V, 50/60 Hz
Power consumption	Approx. 19 W
Dimensions	360 (W) x 98 (H) x 339 (D) mm (14-3/16" X 3-3/4" X 13-3/8")
Weight	6.0 kg (13.2 lbs.)
Temperature	Operating: 5°C to 40°C (41°F to 104°F) Storage: -20°C to 60°C (-20°F to 140°F)
Format	S-VHS, VHS
Video	
Signal	PAL
Recording system	Luminance: FM recording Chrominance: Down-converted direct recording
Input	Composite: 0.5 to 2.0 Vp-p, 75 ohms unbalanced Y/C: Y: 1.0 Vp-p, 75 ohms, unbalanced C: 0.3 Vp-p, 75 ohms, unbalanced (burst)
Output	Composite: 0.5 to 2.0 Vp-p, 75 ohms unbalanced Y/C: Y: 1.0 Vp-p, 75 ohms, unbalanced C: 0.3 Vp-p, 75 ohms, unbalanced (burst)
Horizontal resolution	S-VHS: 400 TV lines, VHS: 240 TV lines
Signal-to-noise ratio	45 dB (S-VHS 3H)
Audio	
Number of tracks	1
Input	Line: -8 dBs, 50 kohms, unbalanced Mic: -67 dBs, 600 ohms, unbalanced
Output	-8 dBs, 1 kohms, unbalanced
Frequency response	100 Hz to 10 kHz (2 hour mode)
Signal-to-noise ratio	40 dB (3 hour mode)
Time / date generator	
Display	Year, month, day, hours, minutes, seconds, recording mode alarm input data, power loss time
Character size	16H
Memory backup	Approx. 1 year
Alarm	
Input	Input ground contact
Camera Switching	Negative pulse output (approx. 5 ms)
Accessories	
Provided accessories	Power cable
Optional accessories	RM-G30U: wired remote control unit SA-K97U: RS-232C interface kit

Product and Accessory Reference Guide

MODEL NO.	DESCRIPTION	PAGE
A10x4.8BEVM	Fujinon 10:1 zoom lens for 2/3" 3CCD	6
A15x8BEVM	Fujinon 15:1 zoom lens for 2/3" 3CCD	6
A16x9B12U	Fujinon 16:1 zoom lens for 2/3" CCD	29
A16x9BE12U	Fujinon 16:1 zoom lens for 2/3" CCD (2x extender)	29
A18x9B12U	Fujinon 18:1 zoom lens for 2/3" 3CCD	6,29
A18x9BE12U	Fujinon 18:1 zoom lens for 2/3" CCD (2x extender)	29
A20x8BEVM	Fujinon 20:1 zoom lens for 2/3" 3CCD	6
AA-G10E	AC adapter/battery charger for NB-G1U	6,26,28,29,42,49
AA-P250E	AC adapter/charger for production cameras and camcorders	6,26,28,29,42
AA-P700E	AC adapter for KY-F32E/50E/55BE/ and TK-C1380E/1270E/1070E/F7300U	32,34,37
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BN-V814	Standard battery pack for GR-DLS1E	18
BN-V856	Long-life battery pack for GR-DLS1E	18
BM-H1400PN	14 inch EBU phosphor reference colour monitor	67
BM-H2000PN	20 inch EBU phosphor reference colour monitor	67
BR-7020ED/EP	Double loading VHS HI-FI duplicator	97
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BR-9020E	960 hour video/audio time-lapse VHS recorder	119
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BR-D85E	DIGITAL-S pre-read editing recorder (digital I/O)	9
BR-D92E	DIGITAL-S pre-read 4 audio channel editing recorder (digital I/O option)	8
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BR-D750E	DIGITAL-S basic editing recorder	12
BR-DV10E	Dockable DV Recorder	16
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BR-S522E	22 series Professional-S feeder/player	46
BR-S525E	22 series Professional-S variable tracking feeder/player	45
BR-S622E	22 series Professional-S recorder	44
BR-S777E	Triple loading duplicator HI-FI S-VHS/VHS	101
BR-S800E	Professional-S JVC bus editing recorder	47
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CB-P27U	Carrying case for DY-90E, DY-700E, KY-D29E/27CE/19E/GY-X2BE	6,26,28,29,42
CB-P29U	Carrying case for DY-90E, DY-700E, KY-D29E/27CE/19E/GY-X2BE	6,26,28,29,42
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DLA-G10E	D-ILA Video/data/graphics projector 1365x1024 (50% off axis lens for keystone)	79
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DS-34	34 minute DIGITAL-S tape	14
DS-64	64 minute DIGITAL-S tape	14
DS-104	104 minute DIGITAL-S tape	14
DS-124	2 hour (124 minute) DIGITAL-S tape	14
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DU-502EG	Long distance twisted pair system	116
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DY-700E	Digital S Camcorder	3
GD-V425PZW	42" 16:9 Flat plasma display	77
GY-X2BE	1/2" CCD Professional-S camcorder	40
GY-X3E	1/3" CCD Professional-S camcorder	41
GR-DLS1E	DV digital still camera / DV camcorder	18
HZ-610MDU	Motorised zoom lens (6mm-60mm) for KY-55BE	34
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HZ-FM13U	Manual focus control for Fujinon lenses	6,26,28,29,41
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HZ-G6350U	Variable focal lens (3.5mm-8.0mm) for KY-F55BE	34,35
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ILA-M570SC, 470SC, 370SC	ILA three lens projector 6000 lumens	85
ILA-12K	ILA graphic super projector	87
J9ax5.2BIRS	Canon 9:1 zoom lens (2x extender) for 2/3" 3CCD	6
J15ax8BIRS	Canon 15:1 zoom lens (2x extender) for 2/3" 3CCD	6
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KA-27E	Camera adapter for KY-D29E/27CE/19E	26,28,29
KA-111U	Adjustable flip out type chest brace for camera	26,28,29
KA-280U	Bulk connector for VC-P110 series cable, VC-P110U / P112U / P13U / P114U maximum extendable length between camera head and RM-P200E is 105 meters (VC-P110U+KA-280U+VC-P114U)	26,28,29
KA-300U	Headset for KY-D29E/KY-27E/19E	26,28,29
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KA-510U	Tripod mounting plate for KY-D29E/90E/35E/27CE/19E/GY-X2BE/X3E	28
KA-A3U	Mic holder for GY-X3E	42
KA-A27E	Mic holder for KY-D29E/90E/35E/27CE/19E	26,28
KA-A30U	Mic holder for GY-X2BE	42
KA-A70U	Mic holder for DY-700E	6
KA-A90U	Mic holder for DY-90E	6
KA-B27E	Betacam BVV-5 adapter for KY-D29E/27CE/19E	26,28,29
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